

SOUTHRAILNEWS

(Official organ of the Southern Railway)

VOL. I

No. 3

JUNE, 1954

Editor :

T. S. PARTHASARATHY

EDITORIAL NOTICE

All contributions must be clearly *typed and double-spaced on one side of the paper only*, and signed, not necessarily for publication but as a guarantee of good faith.

Manuscripts and photographs, not accepted for publication, will be returned only if the sender so requires and encloses the usual stamped, addressed envelope.

Contributions should be addressed to the *Editor*, not by name, and reach him not later than the 10th of the previous month.

The Editor does not assume any responsibility for the accuracy of the news supplied by correspondents or for opinions expressed by contributors. Opinions expressed in the *South-railnews* whether editorially or by contributors should be regarded as having no official authority.

	Annual Subscription.			Single copy.		
	Rs.	A.	P.	Rs.	A.	P.
Railway employees ..	3	0	0	0	4	0
Others ..	4	8	0	0	6	0

Subscribers are requested to inform the management of the change of address, if any, well in time to avoid misdelivery of copies.

Railway employees drawing a salary of Rs. 200 and over, can pay the subscription through their salary bills, and others should remit the full amount by M.O. to

The EDITOR,
Southrailnews,
18-A, Mount Road, Madras-2.

CONTENTS

	PAGE
EDITORIAL NOTES.. ..	5
OVERSEAS NEWSLETTER	9
RECONSTRUCTION OF RAILWAY BRIDGES	13
ELECTRIFICATION OF RAILWAYS ..	19
TO OPERATING STAFF	22
KONDU (SHORT STORY)	23
THE REVISED RATES STRUCTURE ..	25
"JAIPUR," THE TONE OF AUTUMN SUNSET	31
RECENT IMPROVEMENTS IN PASSENGER COACHES	35
PROBLEMS OF A* LOCO MAN ..	37
WATCH AND WARD OR POLICE ? ..	41
S. R. NEWS	43
SPORT	46
OUR COMMERCIAL NEWSLETTER ..	53
STAFF NEWS	55
RAILWAY MISCELLANY	57

NATIONAL PLAN LOAN

The Government of India have announced a $3\frac{1}{2}$ per cent Loan. Many of the staff would have probably read the appeal of the Prime Minister for widespread support for this National Loan.

2. The special characteristics of this Loan are—

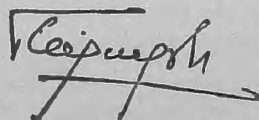
- (1) it is a National Loan and it covers the Central and the State Governments;
- (2) it is required to raise funds for development schemes and for the fulfilment of the National Plan.

Subscribing to this Loan would, therefore, be joining in the mighty and thrilling adventure of building a New India.

3. In order that staff at all levels may share the privilege of participating in a venture which is calculated to raise the economic level of the country, terms to suit the purse of all income groups have been fixed. They are detailed below—

- (a) the minimum amount of loan that can be subscribed for is Rs. 100;
- (b) the interest on Loan is $3\frac{1}{2}$ per cent;
- (c) it is a short term loan repayable after 10 years, i.e., on 19-4-1964.

4. The liabilities of individuals may vary but an investment equivalent to from 1 to 5 per cent of a year's salary may not be a hardship. The Administration is confident that in keeping with the past traditions the staff on this Railway will show a lead in subscribing to the National Loan.



General Manager.

SOUTH RAIL NEWS

Vcl. I

JUNE 1954

No. 3

Editorial Notes

Regional Railway Training Centre at Lahore

THE opening of the United Nations Regional Railway Training Centre at Walton is a good example of fruitful international co-operation. It is the first occasion on which the Technical Assistance Administration has endeavoured in a really big way to develop a regional project in the transport field involving a considerable outlay and embracing the region as a whole.

As a result of rapid changes in many countries of the region in respect of traffic requirements, the density of traffic on many sections of railways, particularly single track sections, has outgrown their respective capacities. The railway systems are confronted with the problem of exploring ways and means to augment their

capacities to enable them to meet their demands more efficiently and economically without, as far as possible, incurring the very heavy expenditure required for doubling the track. The training centre is expected to assist the railways in overcoming such difficulties and improving operation.

The Governments of France, Japan, United Kingdom, Netherlands and Belgium have made generous contributions in the matter of equipment required for the training centre.

Rail Communications in Orissa

The assurance given by the Union Minister for Railways, after his 3-day tour of Orissa State, that railway communications in that State would be

developed quickly must have been received with great satisfaction not only by residents of the State but also by those in other parts of the country which are not adequately served by railways at present. Mr. Sastri announced that the existing facilities would also be improved by the expenditure of Rs. 2 crores on line improvements, about Rs. 17.75 lakhs on passenger amenities and Rs. 21 lakhs for staff amenities in the course of the current year. The railway links to Rourkella, where the new steel plant is located, would receive high priority. The construction of a line from Sambalpur to Titlagarh and the extension of the Rupsa-Ban-Riposi line upto Rairangpur are some of the other works which are on the anvil.

National Railway Users' Consultative Council

The Union Government's anxiety to comply with recommendations and suggestions placed before them by representatives of the people will be evident from their recent acceptance of all except one recommendation made by the National Railway Users' Consultative Council at its first meeting. The recommendation not accepted was to the effect that in eradicating ticketless travel public co-operation be sought and the Zonal Committees be enabled to call upon the ticket checking staff to make checks in their presence. It was considered sufficient to vest this authority with the members of the National Railway

Users' Consultative Council in the first instance.

Important among other recommendations made by the Council were :

(1) A revision of the list of All-India Bodies of educational, cultural and social importance entitled to rail concessions.

(2) Improving the quality of catering on Railways.

(3) The enlisting of the help of State Governments in putting down beggar nuisance in trains and railway premises, and

(4) Developing rail transport capacity to meet the demands of the expanding industries and trade of the country.

Railway Expansion Schemes

The Union Railway Minister announced recently that the Government had decided to lay 1,500 to 2,000 miles of new Railway lines during the Second Five Year Plan. The announcement was made on a very appropriate occasion, viz., the reopening of the 32 mile long Bhagalpur-Mandar Hill Railway which had been dismantled during the 2nd World War. Twice dismantled for military exigencies during the two World Wars and twice relaid, the branch line was originally constructed in 1910-11. In accordance with their policy to restore all dismantled branch lines, the Government in 1951 decided to restore this line also. The work was completed well within the target date of April, 1954 and was

opened for traffic on the 25th April.



Another line which was restored recently was the 34 mile long Nagrota-Joginder Nagar Line first opened in 1928. The restoration of the line was an event of great significance for Kangra and Kulu Valleys. The rerailling of this section will make the Kangra Valley more accessible to tourists while giving a welcome stimulus to local agriculture and trade.

Increase in Tourist Traffic

We have had occasion to comment in our April issue about tourism in India and the building up of a better tourist influx if the potentialities are properly exploited. A recently published report of the activities of the Ministry of Transport in 1953 confirms our expectation that the tourist traffic in India is capable of being increased. The report which enumerates the several measures

which were taken by the Ministry to increase tourist traffic, states that tourist traffic rose from 25,448 in 1952 to 28,060 in 1953. Out of the latter figure, 6,026 tourists were Americans. Improvements to major and minor ports, increase in Indian shipping tonnage and the lengthening of India's road communications are among the other notable features of the activities of the Ministry of Transport.

The Government of India have also been taking steps to promote tourism within the country. To this end, they have decided to publish tourist literature, brochures and folders in Hindi. It is hoped that the publication of tourist literature in Hindi would create a greater awareness among the travel-minded public to places of historical and cultural importance and to scenes of natural beauty. The Government have also decided to publish tourist literature in French so as to reach the French knowing peoples in Europe.

Subscribers are requested to intimate the Editor of any change of address to avoid non-delivery or mis-delivery of copies.

EDITOR

SOUTHRAILNEWS

18-A Mount Road - Madras-2

WALTERISATION PRODUCTS

FOR METAL TREATMENT AGAINST CORROSION

FOSCOTE - R. S.

FOSCOTE - G. A.

FOSCOTE - A. L.



WALTERISATION - P. H. O.

WALTERISATION - 'E'

DERAN

FOSCOTE - R. S.

for rusty ferrous surfaces

Cold phosphating treatment for rusty surfaces. Can be used *in situ* by brush or spray gun application.

FOSCOTE - G. A.

for galvanised and zinc surfaces

Cold pretreatment solution which will produce effective paint adhesion on zinc or galvanised surfaces.

FOSCOTE - A. L.

for aluminium and aluminium alloys

Cold application process which has been specially developed to produce satisfactory paint adhesion to aluminium and aluminium alloy surfaces.

WALTERISATION - P. H. O.

for rustproofing and paint bonding

Hot bath immersion standard process—the only approved wartime alternative to Cadmium Plating for Class-A Anti-Rust Protection of Aircraft Parts. Simple variations in processing technique permit rustproofing/phosphating of a variety of ferrous and non-ferrous metals.

WALTERISATION - 'E'

for fast phosphating

Hot bath immersion process for quality phosphating where speed is essential.

DERAN

for derusting and phosphating

Hot bath immersion and cold brush-on types for derusting and neutralising iron and steel. Free from the defects of other pickling acids.

FULL PARTICULARS FROM

MARTIN BURN
LIMITED
AGENCIES DEPARTMENT

12, MISSION ROW - CALCUTTA 1

BRANCHES:

Bombay Life Building
Connaught Circus, NEW DELHI

Esplanade House
Waudby Road, BOMBAY-1

Westcott Building
The Mall, KANPUR



WORLD OF RAILWAYS

ARTHUR L. STEAD

London Correspondent

HULLO. Southern Railway folks! Here's warmest greetings to you from the men and women railway workers of Britain.

This letter, my first offering in what it is hoped will prove an attractive series of articles covering railway developments far and wide, comes to you from the heart of Britain, where the railway was born nearly a century and a quarter ago.

World's First Railway

It was on 27th September, 1825, that there was opened the world's very first railway—the Stockton and Darlington, in Northern England—and out of that diminutive system there has grown the vast steel network covering almost all the land surface of the globe, with the Indian Railways right in the forefront and themselves now in their one hundred and first year.

Five years after the first passenger train steamed proudly over the Stockton and Darlington line, George Stephenson, the "Father of Railways", introduced on the Liverpool and Manchester system his famous steam locomotive, "Rocket", that paved the way for the introduction of the "Iron Horse" here, there and everywhere,

Robert Stephenson, as you will all know, was the son of the "Father of Railways", and the engineer for India's very first railway, the Bombay-Thana 21-mile line, opened on 16th April, 1853. If the Stephensons, father and son, were alive today, they would indeed delight in observing India's century of railway progress, and also be intensely interested in perusing the pages of this issue of "SOUTHRAILNEWS".

Early days in Europe

Perhaps in my opening contribution, I cannot do better than tell readers of the early days of the railway in Europe, and of the invaluable groundwork performed by European engineers and operating men, in the years that preceded the entry into India of the "Iron Horse".

The "Rocket" was the first steam engine in the world to embody the elements of efficiency which remain essential features of modern locomotives, viz., the internal water-surrounded fire-box and the multi-tubular flue, the blast pipe, and the direct connection of the steam cylinders with the two driving wheels on one axle.

Following the achievement of the "Rocket" in 1830, European lands, as

far apart as Spain and Poland, and Holland and Italy, began to get busy planning and building railways.

The double-track Lyons to St. Etienne line, in France, was the first steam-worked railway on the European mainland (as distinct from Britain). In its construction were included two innovations—the replacing of cast-iron rails by forged iron, and the substitution of wooden sleepers on ballast for the stone blocks previously employed. The Lyons Railway also was outstanding because of the running thereover of the first steam locomotive to which Marc Seguin applied his clever invention, smoke tubes, and which he fitted with a fan forcing air into the firebox.

On the Continent

On 5th May, 1835, the first Belgian steam-worked railway was opened, between Brussels and Malines, this being followed in December of the same year by the opening of Germany's pioneer steam line, built by Paul Denis, between Nuremburg and Furth.

Both the pioneer Belgian and German railways were modelled very largely upon the Liverpool and Manchester system. The first German steam locomotive was the famous machine, "Adler", which on the opening of the Nuremburg-Furth line drew a train of nine coaches carrying 200 guests over the $3\frac{1}{2}$ mile route in nine minutes.

In the early development of railways, Austria was to the fore. In September, 1828, there was opened the first section of the Mildau-Danube Railway, worked by horses. Steam locomotives first appeared in Austria in 1837, when there was opened the Vienna-Florisdor section of the Vienna-Bochnia line. Collaborating in this undertaking was the Engineer, Ghega, who later emerged as the builder of Europe's pioneer mountain railway—the Sammeringham, opened just one hundred years ago.

Following Austria, in 1839 both Holland and Italy opened their first steam-worked railways. Holland's

pioneer steam line linked Amsterdam with Haarlem ($11\frac{1}{2}$ miles), and was opened on 24th September, 1839. Four steam engines maintained the service, these being named respectively "Speed", "Eagle", "Hope" and "Lion". The first train consisted of nine cars drawn by two locomotives, and it covered the $11\frac{1}{2}$ miles in thirty minutes. Some 31 watchmen spaced along the route served as signalmen, transmitting signals to the train by flags and lamps.

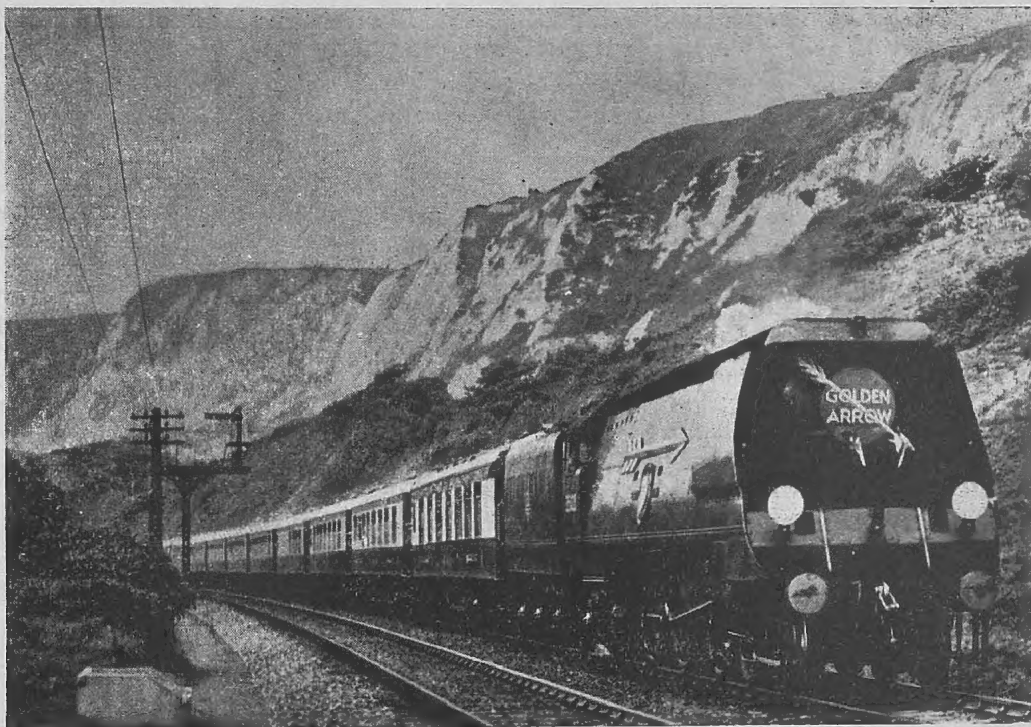
Judging by contemporary documents, rail travel over the first Dutch steam line must have been a somewhat noisy experience. A quarter of an hour before departure, a bell was sounded for five minutes, the bell being rung at a faster rate two minutes before departure. The guard then tooted loudly on his trumpet and off sped the excited travellers!

In Italy and Hungary

The first Italian railway was the five mile long Naples-Portici line, opened on 4th October, 1839, with Armand Bayard as engineer in charge of construction. The first train was hauled by English-built steam locomotive "Bayard." It consisted of seven coaches carrying about 200 guests. Eleven minutes was occupied on the journey, and the Naples-Portici line had the honour of being the only pioneer railway in Europe to be officially opened in the presence of the local Royal Family. With such an auspicious send-off, there is no wonder the steam railway soon prospered in Italy and gradually developed into one of the most extensive transportation systems in the world.

Six years after Italy first began to enjoy the benefits of steam traction, the "Iron Horse" was introduced in two other European countries—Hungary and Poland.

The Budapest-Palota line formed the initial section of the Hungarian railways, and the pioneer steam locomotive trials were carried out on this route in



On Britain's "Southern Railway"—Modern passenger practice is illustrated in this picture of the far-famed daily "Golden Arrow" London—Dover Pullman express, with passengers for Paris, France, passing alongside the white cliffs of Dover.

1845. On 15th July, 1846, the 20½ mile long Budapest-Vacz line was opened to traffic. Alexander Petofi, a Hungarian poet of the period, filled with wonder on making his first railway trip, wrote a poem of eight stanzas entitled: "Vasuton" (which means "By Railway"), in which he expressed his admiration as follows: "Break the chains of slavery to forge them into rails," which was all very praiseworthy and picturesque, and doubtless well reflected the feelings of everyone on the coming of the railway.

Poland votes for Horses!

On the eastern side of Europe, Poland came into the picture in 1845, when steam operation commenced on the Warsaw-Rogow and Skierniowice-Lowicz sections of the Warsaw-Vienna Railway. The construction of this line actually commenced in 1839, and there was much difference of opinion as to whether

steam traction or horse haulage should be employed, a Government committee of inquiry in the end actually voting in favour of horses! However, impressed by Stephenson's achievements in England and elsewhere, the Polish authorities by 1845 had become convinced as to the capabilities of the steam engine, and so it was a primitive "Iron Horse," and not a four-footed animal, which proudly drew the pioneer train over the Warsaw-Vienna route.

Switzerland, now the hub of the intricate European rail network, opened her first steam-operated line on 7th August, 1847, from Zurich to Baden. Through trains made the 14½ mile journey in 38 minutes, and stopping trains in 45. Historians have recorded how, during the first week's working of the Zurich-Baden Railway, some 9,000 excited passengers availed themselves of the service, and how by degrees all Switzerland became keenly rail-minded,

Today, of course, Switzerland stands out as one of the world's largest employers of electricity for rail operation, but in point of fact it was the steam engine, first utilised in Switzerland in 1847, that really laid the foundation of the country's fine rail machine.

All the time the railways of the European mainland were bringing their pioneer lines into use, in Britain, and far away across the Atlantic, employment of the steam locomotive was proceeding apace. From 23 miles of completed railway in 1830, the rail mileage of the U.S.A. increased to 2,818 in 1840. In Britain, London and Birmingham had, by 1838, been linked by steam railway, and connections by way of the Grand Junction and Liverpool and Manchester Railways, gave direct steam communication between London, Manchester and Liverpool, and other north-western points. By 1840, there was also direct steam rail communication between London and

York, London and Bristol, and London and Southampton.

India takes to Railways

At the time of the opening of India's first railway in 1853, Europe had quite an extensive railway system in operation, but since that momentous day, 101 years ago, when the first train steamed over the Bombay-Thana tracks, India has leapt ahead and today her far-flung rail network ranks high among world transportation undertakings.

All the early railway and locomotive builders appear to have been a very co-operative group of men. The nineteenth century rail pioneers formed one happy family, and it is nice to think of George Stephenson and his gifted son, Robert, in England; Marc Seguin, in France; Paul Denis, in Germany; and Armand Bayard, in Italy; all freely exchanging notes and experiences to further rail transport in Europe and bring the "Iron Horse" to India.

HEATLY & GRESHAM LIMITED

INCORPORATED IN ENGLAND

CALCUTTA - BOMBAY - MADRAS - NEW DELHI

SOLE AGENTS IN INDIA FOR

GRESHAM & CRAVEN LTD., MANCHESTER } S.J. Loco Vacuum Ejectors & Automatic Steam
GRESHAM & CRAVEN OF INDIA LTD. } Brake Valves, R. C. W. & Simplex Injectors,

Ross Type Safety Valves, Vacuum Brake Equipment & Components, Vacuum Exhauster Sets, etc

HASLER TELEGRAPH WORKS LTD., Locomotive & Carriage Speed Indicators & Recorders
Revolution Counters.

JOHN LEVICK LTD., Rolling Stock Internal Fittings, Commodes & Flush Tanks, Wash Basins
& Bathroom Fittings.

OXYCHLORIDE FLOORING PRODUCTS LTD., Elephant Brand Composition Flooring.

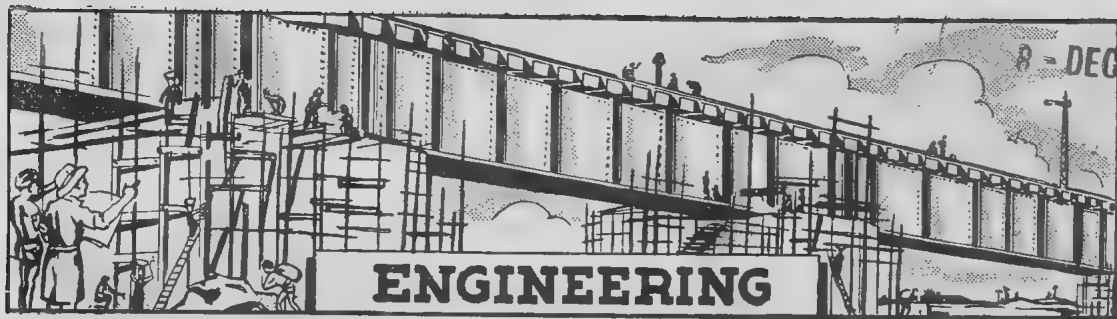
BECKETT LAYCOCK & WATKINSON LTD., Railway Rolling Stock, Road & Marine Windows

CLYDE BLOWERS LTD., Clyde Patent Soot Blowers for all type of Locomotive Boilers.

THE EVERLASTING VALVE CO. (G.B.) LTD., Blow off Cocks & Valves for Locomotives
& Industrial purposes.

AND OTHER MANUFACTURERS OF RAILWAY MATERIAL AND EQUIPMENT

Also for **MACHINE TOOLS & GENERAL ENGINEERING EQUIPMENT**



RECONSTRUCTION OF RAILWAY BRIDGES

~~~~~ M. GANAPATHY ~~~~~

*Chief Engineer*

**T**HE construction of bridges on Railways presents a big problem when compared with other reconstructions, that is, on highways. In the latter case, there is no time limit and a diversion is formed by the side of the highway. This diversion need not be to a high standard—in some cases just a cutcha roadway—and the road vehicles use it without much difficulty or inconvenience. In Railway bridge reconstruction, however, it is different. On construction lines it is almost the same as bridges on highways, where the time for reconstruction is not material. But in the reconstruction of bridges on the open line, that is, the line already open for traffic, the problem is more complicated as train service has got to be maintained while the bridge reconstruction is in progress; and when the frequency of train service is more and consequently the time between trains is less, various measures have to be adopted.

Originally, for such bridge constructions on the open line a diversion was laid, thereby reducing the bridge reconstruction to one similar to that on construction lines or on highways, the only difference being that the diversion had to be laid to a proper standard so that the train can pass over it safely. In this connection it is necessary to point out that while the road is under

the Government, the vehicles that travel over it are not under Government, whereas in Railways both the road as well as the vehicles that pass over it are under one authority, thereby making it imperative for them to adopt the maximum safety measures, as, if anything untoward happens, they are responsible entirely.

### Diversions

Forming a diversion is not only very costly, due to the long length of the diversion involved, especially in high banks and steep gradients, but also the time taken on the diversion is so much that it upsets the timings of all trains. In places where it is possible, a method of spanning the required length by temporary girders is resorted to. In deciding the span of the temporary girders, the maximum length that will be tackled upto the bottom of the founts is ascertained and the span is determined allowing for the retention slope.

Upto a certain span, it is possible to use one temporary girder and finish the bridge in one stage. But when the span of the existing bridge is long, say 40 ft., the temporary girders will be probably more than 60 to 70 ft. and in this case each abutment is tackled separately by putting temporary girders on the bank as well as a sleeper crib in the bed to

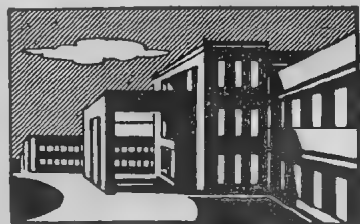
# NATIONAL PROSPERITY *needs*

More Roads



More Power Projects

More Schools



More Hospitals

**BUILD THEM WITH**

**SANKAR BRAND**



**PORTLAND CEMENT**

**THE INDIA CEMENTS LTD., MADRAS • 1**





support the other end of the girder, and when one abutment is finished the same arrangement is repeated for the other abutment.

The crib in the bank has to be erected between trains and sometimes has to be done in more than one stage, i.e., in portions within time between two adjacent trains, and then the girder erected, which may be during another similar period. At the end of each stage it should be seen that the track is well supported to take the train.

### Multi-span Bridges

Till now I have been dealing with only single spans. In the case of multiple spans, doing each abutment and pier in separate stages will involve a long time and in such cases, especially in long-span bridges, investigation is usually made to see whether the stream cannot be diverted slightly, by half a span, and if this is found possible, the piers can come in the middle of the existing spans and can be built without meddling with the existing structure. In this case, to change the girders in the final stage it is necessary to introduce a span of half a length of the temporary arrangement, when the girders are being traversed to their new position.

All the above temporary arrangements allow us to build the pier only up to the bottom of the existing girders or the temporary girders that are put in. For building above this level, the temporary girders are removed and a system of strengthening the track rail by a set of additional rails is adopted so that the masonry can be built up to the proper level and bed blocks also put to the correct level so as to get them upto the bottom of the girders. Even in shallow spans, once rail strengthening arrangement is made, we can build up the masonry and bed block to the final required level.

The rail strengthening arrangement is to introduce clusters of rails, two on each side of track rail, and these will be

secured to the top of sleepers by plates and bolts, so that these together with the track rail supported on either side by sleeper cribs, is strong enough to take a train safely and without undue sagging.

Now coming back again to the small spans, there are many irrigation channels in the delta region and these have generally 2 ft. to 6 ft. arch bridges. Rebuilding these will be costly if temporary arrangements are resorted to. To avoid this, where the irrigation channels can be slightly diverted, pushing R.C.C. pipes through the banks is being adopted. This arrangement does not meddle with the track at all and the pipe is pushed through the bank by scooping out the earth slowly and pushing the pipes by means of jacks. In this arrangement, the cost is only a fraction of what will be the cost of temporary arrangements to be put in for the reconstruction of the bridge.

### Replacement of Girders

So far I have been dealing with the sub-structure of the bridges, that is, the masonry portion. When heavier engines are required to run, it is sometimes found that the masonry structure is quite strong enough to take the increased load but that the girder is not strong enough. In this case the girder has to be replaced by a stronger girder. For these, various methods are adopted:

1. If the girder is strong enough to take the increased shear, adding a flange plate on top and bottom will suffice for the increased strength required. In this case, the depth does not differ much from the original girder and no alterations are required to the masonry, the slight increase in depth due to the addition of the flange plate being compensated by lifting the track slightly on the approaches.

2. The girders are duplicated to get the required strength. In this case also the alterations to the masonry are not much.

3. Introducing a stronger girder which means, naturally, a deeper one. In this case, either the track should be raised by the difference in the height of the two girders, or the masonry has to be dismantled and bed blocks put in at a lower level. Deciding which of the alternatives is to be adopted depends upon the merits of individual cases and also consideration of high flood water level and the existing gradients on either side of the bridge.

In all the above three cases, the usual method adopted for changing the girders is for the new spans that are to be inserted, to be erected on cribs by the side of the existing spans and, during an interval between trains, the old span is slewed out on to cribs erected on the other side and the new span is slewed in to the correct position and

the track restored. The above is possible only upto spans of 60 ft. and where stream or bed is dry during parts of the year. For truss spans, where the bed is dry for part of the year, the new span is erected on the bed of the river and for changing the spans, the old span is run down a ramp with the help of electric winches and the new spans are raised to position by electric winches on proper ramps.

### Other Methods

In cases where the stream is perennial or where water exists always, it may not be possible to adopt the above procedure. In that case, a temporary span with gantry arrangements is fabricated and erected by the side of the existing span and during an interval between trains, the old span is lifted.

Train passing on bridge supported on sleeper cribs.





The Dhorabhavi Viaduct on the Guntakal-Bezwada section mentioned in this article.

placed on trollies on the service span and taken out, while the new span is brought by trollies and left in position with the help of service span and gantry. In plate girder spans it invariably happens that the gantry girders are placed on the outside of the existing spans so that the spans can be lifted bodily and placed on trollies and moved out while the new spans are also brought in, fully fabricated, on trollies to the service span and lowered into position.

In the case of truss span, however, this is not possible and so a service span, which goes inside the existing girders, is fabricated and this is erected at a higher level than the existing flooring and the track is regraded on either side. In this case, safety

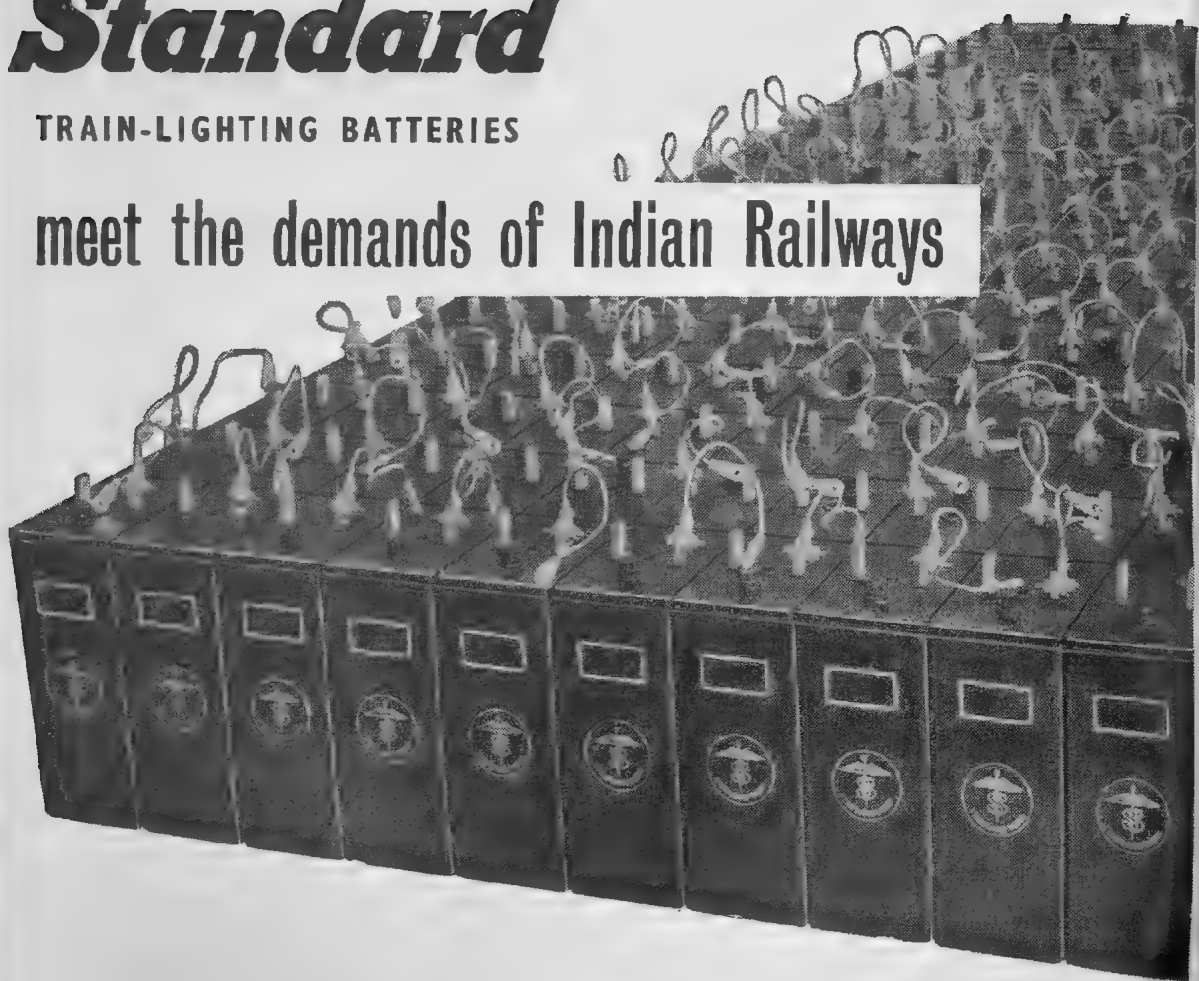
precautions are necessary so that carriages having doors opening outwards, are not allowed to open the doors while passing these spans and they are specially locked before entering the span. This arrangement is necessary as the truss spans have got to be cut out piecemeal and removed and cannot be taken as plate girders are done, i.e., fabricated fully and taken and erected once for all.

One case of strengthening a truss span adopted was in the case of a 250 ft. span girder on the Dhorabhavi Viaduct. Here the span was strengthened by an inverted bow attached to the bottom boom of existing truss span and the design and strengthening done are very interesting but too elaborate to be discussed in a short article like this,

# Standard

TRAIN-LIGHTING BATTERIES

meet the demands of Indian Railways



STANDARD Train-Lighting Batteries are *wholly* manufactured in India, and specially suited to Indian working conditions. They are being largely used by all sections of Indian Railways.

STANDARD train-lighting cells have genuine hard rubber containers, with splash-proof hard rubber lids and plugs. The plates have adequate mechanical strength and are rigidly welded together to form positive and negative groups. STANDARD train-lighting batteries are thus unaffected by vibrations and impacts met under service conditions.

The factory has considerably enlarged its Train-Lighting Battery Section. This is now fully equipped to meet the increased demands for railway batteries, due to widespread use of air-conditioning and fans in railway carriages. Indian Railways can now rely entirely on STANDARD

**Standard  
Batteries  
Limited**

43, Forbes Street, Fort  
Bombay

Factory :  
Vakola, Santa Cruz  
Bombay





## ELECTRIFICATION OF RAILWAYS SOUTHERN RAILWAY

S. C. B. MAZUMDER

*Deputy Chief Electrical Engineer*

**I**N India, Railways have mostly the single line system of working. On the Southern Railway particularly, except for very short distances between Madras Central and Arkonam—43 miles of double line (Broad Gauge) and Madras Beach and Tambaram—18 miles of double line (Metre Gauge), the rest is all single line working.

Slowly but steadily most of the main lines and even some of the branch lines, have reached their maximum capacity for handling traffic. Unless the number of block sections are increased and additional loops, buildings for stations, staff, cabins, etc., required for this purpose on more important and main lines where capacities must be increased are provided, a time is fast approaching when the already talked of "serious bottlenecks" are going to be the "chronic cry" for inability to handle the growing traffic.

### Rehabilitation Programmes

Since the attainment of freedom, India has been striving and successfully at that to improve on all fronts—economic, hygienic, social, production

of food, industrial, hydro and thermal development for electricity and transport (rail, road, river, etc.). Various other rehabilitation programmes are being taken up by the different departments of the Union and State Governments. In the first five year programme, apart from the multifarious schemes, there are extensive Thermal and Hydro projects all over India to husband natural water resources available to produce sufficient and, in the long run, cheaper electricity required to help industrialisation of the future India.

As a result of the after effects of the last World War II, Indian Railways have been left in a state not only seriously depleted but facing a breakdown of the transport system unless prompt and early steps were taken to rehabilitate tracks, bridges, passenger stocks, wagons, locomotives, etc., costing a colossal sum of money, most of which had to go out of India.

The Railway Ministry is tackling all these problems one by one as funds are available. They have rightly installed a locomotive factory at Chittaranjan

which is already producing complete locomotives for Indian Railways. It is hoped to build 120 locomotives per year in 1956 and produce enough number of locomotives to meet the full demand of Indian Railways making her self-sufficient as far as her requirement of locomotives is concerned, in not too far a distant date. The Board have also decided to build a Coach Building Factory at Perambur, which is expected to go into production by the latter half of 1955, and when in full swing, will produce 350 coaches per annum. With these coaches and those produced by the Hindustan Aircraft Ltd., Bangalore, and other indigenous sources, most of India's needs for coaching stock will be met from her own manufacturing resources.

### Travel Comforts

India is a vast country where distances between important cities and towns, etc., are great and the time taken for travelling as also for transporting goods being considerable, is a source of great inconvenience to the public. In addition to rehabilitating the Railways in general as mentioned above, the Ministry is naturally very keen to improve travelling conditions by providing comfortable, fast, frequent and sufficient services in a tropical country like ours, in addition to other facilities required at terminal and intermediate stations such as booking facilities, waiting-rooms, retiring rooms, cool drinking water, refreshments and food stalls, catering, etc.

All coaching stocks now built in India or still being imported from abroad are of a special construction in which every consideration is being given to make them comfortable. Fans are being fitted in all classes of coaches, with better lighting, night lights, safety catches to prevent ingress of thieves, etc.

Air-conditioned coaches, manufactured in Railway Workshops, are being slowly introduced on Mail and Express

trains on Broad Gauge and will shortly be introduced on Metre Gauge trains as well; this is a special feature of travelling in 'extreme comfort' by such of those who can pay a little extra for such long and arduous journeys. A time may come when such facilities may even be possible for all classes of travelling public.

Except small items of train lighting switch gear, fans and light fittings, and lead acid train lighting batteries, most of the heavy electrical equipments including that of air-conditioning apparatus for trains are required to be purchased and imported from abroad. It is hoped that India will be able to manufacture and produce all such requirements in the country in the very near future.

### Faster Service by Electrification

As regards faster, cleaner and frequent service, as people in other parts of the world have found, India is also realising that electrification of Railways is perhaps the only solution. With more and more hydro and thermal projects being completed, electricity can be had at almost any part of the country and in sufficient quantity not only for the various growing industries of the free Indian enterprising business concerns but also for electrification of Railways, specially on those sections where doubling of tracks, etc., are of the primary importance, with resultant conservation of coal which is now obtained at high cost.

On this Railway, we have between Madras Beach and Tambaram, 18 miles of double line Metre Gauge suburban electrified section handling traffic between the city and suburban areas south of Madras. This section came into existence in 1931 when only 100 trains (up and down) ran per day. The popularity of this fairly fast, clean and comfortable service kept on increasing so that in 1953 we have 210 (up and down) trains handling 25,946,801 passengers per annum.



The Suburban Electric Train Service between Madras and Tambaram.

With a view to augmenting frequent and faster services to cope with the growing demand, six more new 4-coach multiple unit trains have been ordered and are expected by the end of 1954 and another six 4-coach multiple units are under order in 1955-56. The existing coaches will also require replacement and programmed replacement of units with more comfortable and modern coaches is in hand and will be ordered from abroad during 1956-57 and subsequent years.

The Ministry of Railways have sanctioned a new Railway link between Quilon and Ernakulam at a cost of Rs. 5.69 crores and the permanent-way portion of the work on this section is already in progress. From the beginning, it has been stressed that with the assurance and availability of enough electricity from the Travancore-Cochin State, this section of Railway line should be electrified. Coal, the vital item required for haulage of trains in this part of India, has to be brought all the way from Bengal, Singareni and Central Provinces coalfields by sea-cum-rail route, costing Rs. 63 per ton. Apart from this high cost, the coal thus

released can be better utilised for steel and other essential heavy industries now being opened in various parts of the country, while electricity, available at site and at a fairly cheap rate, can be utilised for electric traction giving the public a clean, comfortable and quick service.

### **Economics of Electrification**

The economics of electrification is a complicated matter requiring electrical knowledge, knowledge of locomotion, civil engineering and other considerations of traffic operation. The scheme referred to in para above has been technically investigated and discussed at length with the Railway Board and when sanctioned, may be the beginning of further electrification on this Railway.

There have been demands in the past for an extension of the existing suburban service from Tambaram to Chingleput and beyond. A preliminary investigation made in 1947-48 for the electrification of the Tambaram—Villupuram section was scrutinised by our Consulting Engineers, Messrs.

*(Continued on page 40)*

## TO OPERATING STAFF

From your C.O.P.S.

Transport is important in any country. Its economy depends upon it. In it, Railways have the leading role. Our Railways are owned by the Nation. We are a democracy now. We are trying to achieve long overdue progress. The key to progress is production. What is produced has promptly to be transported.

So, a lot is expected of us. We are judged by results, not excuses. We and our Railways have a creditable past. In the last war we did a swell job. Then we were merely British subjects. Now we are Indian citizens. Can our performance now be less than then? Should it not be better than ever before?

On all of us Railwaymen a great responsibility lies. It is more so with us Operating Staff. We run trains. Other staff help us to do so. Ours is rush work. We are more open to direct public criticism. Such criticism is pungent and frequent.

Accidents, delays and discourtesy agitate the public mind. Accidents arise mostly out of ignoring rules, or negligence. Delays to trains, engines, waiting traffic—any delay is bad. Discourtesy often arises from crudeness rather than rudeness. Should we not keep ourselves clear of these?

Our operating is under difficult conditions. More is expected of us than we can cope with. There are two limitations. One pertains to required equipment and resources. In this respect, much is being done under the First Five-Year Plan. More is to follow under the Second Five-Year Plan.

The other limitation pertains to our effort and keenness. There is no valid reason for it. Should we not strain every nerve and do the best? The public complaint is that we don't do so. A few good workers may resent this charge. But what about the shirkers who spoil our joint effort?

"ACCENT on ACTION and ACHIEVEMENT" should be our watch-word. Ours is team-work. We can't afford to let some shirk work. Ours is rush work. It can't get lost in correspondence. Our huge organisation needs a hierarchy. But all of us jointly work for one purpose, i.e., to provide efficient and satisfactory Transport.



Chief Operating Superintendent.



# KONDU

## • SHORT STORY •

~~~~~ S. R. SARMA ~~~~~

Chief Operating Superintendent

THE customer had waited for 30 minutes. He wanted to book a parcel. Kondu the Parcel Clerk was reading a newspaper. The awkwardly placed customer's patience was wearing out. He said "Mister, how long am I to wait for your pleasure?" Kondu looked back at him, stared vacantly for a few seconds, and turned again to his newspaper. This made the customer more impatient and angry. He raised his voice and said "I am sure you are not paid to read newspapers when on duty." The clerk turned to him again and said "If you can't wait, come some other time."

The customer could stand it all no longer. He rushed to the Station Master. He detailed to him what had happened. The Station Master listened to him. Then he smiled and said "I wish I can help you. But I believe in no friction between persons. Don't you know these present-day clerks? The trouble is they think they are educated! They resent interference. I have to be tactful. I belong to an older generation. When I was a clerk I worked all the time. Times have changed. I can talk to you for hours on this matter. Now go and try again. The clerk should have finished reading his paper by now."

Rightly enough, when the customer went again, Kondu was not preoccupied with a newspaper. He said "So you have come again as advised! I would have attended to you last time. But you were sarcastic when you said 'Mister, how long am I to wait for your

pleasure'. You should have said 'I am sorry to disturb you, but will you please book my parcel? I am in a hurry'!" The customer lost his temper. He said "To hell with you! Telling me about good manners! Preaching without practising!!".

The customer's retort unnerved Kondu. His first impulse was to retaliate. But like all bullies, he knew one who retorted was strong. He realised that discretion was the better part of valour, and so he accepted the parcel for booking. Then he noticed that it was addressed by name to the Principal of a College at Madras. He was amazed at a coincidence. It was the same Principal to whom he needed a letter of introduction to get his son admitted into the College. He thought quickly. He felt awkward. His problem was how to chat agreeably with the customer who could perhaps help him.

He asked the customer what the contents of the parcel were. The reply was that it contained sweets and other dry refreshments. A minute's pause followed. Then Kondu asked the party if the Principal was a relation of his. The customer said that he was a colleague of his. The clerk asked "Are you a Professor, Sir?" The customer said smilingly "Yes, and I am permanent Principal too. I am on leave in my village. The college-day comes off next week. Unfortunately, I am unable to be at Madras in time for it. So, I am sending this parcel as I always

distribute sweets, etc., to the students on that day."

Kondu was all deference to the customer for the remaining few minutes he was there. He could not decide whether he should apologize then and there for his earlier rudeness. He wanted somehow to make up for his earlier conduct. That evening he made enquiries about the customer. He learnt that the gentleman was highly respected in the place and very influential and helpful. He thought as to how to get at the gentleman, and to enlist his interest in his (Kondu's) son. In this predicament he cursed himself for his behaviour and wished he had known whom he was dealing with, but, he told himself, who could imagine one looking so humble being a Principal.

Late in the evening, Kondu mustered courage to go to the gentleman's house. The gentleman called him in. Kondu said "I am sorry I was rude to you. I came to apologise to you. I did not know who you were. Had I known, I would have been respectful. Forgive me, Sir." The gentleman replied "You have made things worse now. I was not unmindful of the change in your attitude when you knew my identity. But it surprises me your saying even now as though your rudeness to others would be alright, but applied to me it was not so."

Kondu felt nonplussed. He had made things worse. He realised that he couldn't refer to his intended request to the gentleman. He stood up and with folded hands said "Forgive me, Sir. I apologise unqualifiedly. I have learnt a lesson for the future. I

promise hereafter never to be rude or indifferent to anyone. I too was in College 12 years ago. I got the good conduct prize in two consecutive years. I have been in the Railway for ten years. I don't know what made me deteriorate badly in these ten years. I can only atone for my deterioration by being a good public servant from now on."

The Principal was impressed. He asked and found out from Kondu all about himself. This gave Kondu a chance of telling about his son and the difficulty in getting him admitted, despite his good marks, in a college. The Principal volunteered to get the lad taken in his college. And for years he took parental interest in the lad, who passed out of the College, with a creditable pass, then appeared for the I.A.S. Examination, and was selected and posted as an Assistant Collector. The lad was also married to the Principal's grand-daughter.

During the 4 or 5 years, Kondu was a changed man. He was scrupulously polite and attentive to the customers. He had become the Station Master at the same station. He persuaded all his staff to treat the public well. The station work went on smoothly. Maximum good-will existed between the station staff and the public. No occasions arose for complaints. Corruption was unknown. Superior officers considered the station a model one. And, as I am concluding this story, Kondu is being tipped for selection to a higher post carrying thrice his present pay.



THE REVISED RATES STRUCTURE

S. RAJAGOPALAN

District Commercial Superintendent

THE Rates Structure that was in force until five years ago was the subject of severe and continued criticism by the commercial community in the country. This criticism was largely based on the ground that the rating structure was not only very complicated, but also operated harshly on long distance traffic, and was inequitable in several respects. With a view to simplifying the rating structure as well as eliminating some of the difficulties complained of, the work of rationalising the entire position was undertaken and completed in 1948. The important changes brought about as a result of this revision are enumerated and discussed in this article.

The basis of the old rating structure consisted of a general classification of goods, containing ten classes, with four sub-divisions in class 2, three sub-divisions in class 4 and two sub-divisions in class 6. There was a schedule of maxima and minima rates applicable to the various items in this classification, the maximum commencing from 380 pies for class I, and ending with 2,870 pies for class 10, and the minimum commencing from 100 pies applicable upto class II and 166 pies applicable to all the other classes.

The above rates were applicable on a "flat" basis irrespective of the distance over which traffic was carried, and separately over the distances on each Railway concerned in the movements. The authority of the individual Railway Administrations to adjust these basic class rates was limited by

the schedule of maxima and minima rates referred to in the previous para.

Criticism of Old Rates Structure

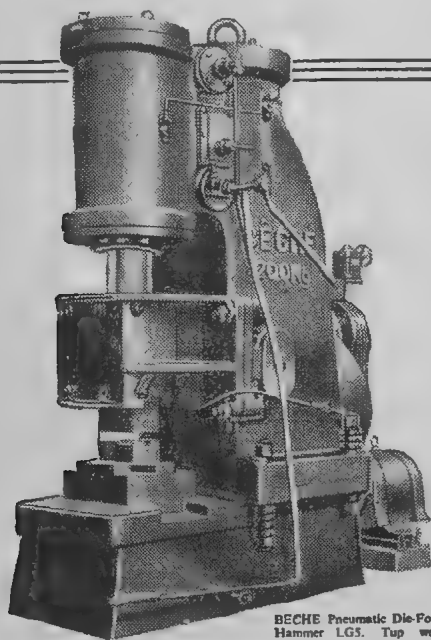
These class rates increased in direct ratio to the distance carried and formed the first fundamental objection to the rating structure as it obtained then, as it ignored all the transport economics inherent in long hauls and the ultimate capacity of the commodities to pay for carriage. Arising out of these, there was a persistent demand from the commercial community that the uniform rate charged, per maund per mile, should decrease with the increase in the distance, or in other words, that the basic class rates should be "telescopic" and not "flat." Concurrently, there was also a demand that this telescopic basis should be applied on "through" distances irrespective of the number of individual Railways that may be concerned in the transaction.

There was a good deal of force in the above criticism of the classification and the schedule of rates which were in force. The revised classification and the basic rates applicable thereto, have eliminated these difficulties. The revised classification has also aimed at rationalising the arrangement of the various commodities in different groups, bearing in mind that the fundamental principle for the grouping of commodities should be that each variety of goods should be charged not more than what it can ordinarily afford to pay for transportation and, by and large, no less than what it costs to move it,

BECHE PNEUMATIC DIE FORGING HAMMER

LG 5 (440 lb. TUP)

For the economical mass production of small drop forgings this pneumatic hammer easily surpasses the drop hammer or press; it will deliver rapid blows with resulting increased production and a higher yield from one die. Control is easy, but precise, by a pedal regulating blow rate and effect. Its speed and ease of control permit the use of multiple dies to full advantage.



BECHE Pneumatic Die-Forging Hammer LG5. Tup weight, 440 lb. Effect of blow, 3,900 ft.-lb. Blows per minute, 170.

- PNEUMATIC HAMMERS, up to 4,950 lb. tup weight.
- COMPRESSED AIR HAMMERS, up to 66 lb. tup weight.
- DOUBLE ACTING SWAGE FORGING HAMMERS, effect of blow, up to 725,000 ft.-lb.
- FORGING HAMMERS, compressed air or steam, up to 6,600 lb. ram weight.
- HIGH SPEED DIE-FORGING HAMMERS, effect of blow, up to 72,500 ft.-lb.
- SWAGE FORGING HAMMERS, effect of blow, up to 160,000 ft.-lb.

General catalogue of all machine tools we distribute in India will be sent to you on request.

Agents :

FRANCIS KLEIN & CO., LTD.
1, ROYAL EXCHANGE PLACE, CALCUTTA-1

Bases of Revised Classification

The general classification, as revised, is based on two broad considerations, which are as under :—

- (a) Those relating to the ability of the commodity to pay for transport ; and
- (b) Those relating to the cost to the Railways of transport (to the extent that this could be estimated).

The factors taken into consideration to determine the ability of the commodities to pay for transportation are mainly the following :—

- (a) The value of the goods in relation to weight ;
- (b) The uses to which the commodities are put ;
- (c) The stage of manufacture ; and
- (d) Volume of traffic.

The factors affecting the cost of transportation are broadly the following :—

- (1) Bulk in proportion to weight ;
- (2) Risk of damage, wastage or deterioration in transit ;
- (3) Speed of transit ; ; and
- (4) The volume of traffic.

On the above considerations, the classification was overhauled and the commodities have now been grouped into 15 classes as against 10 formerly.

The basis of rates applicable was changed over from a "flat" basis to a "telescopic" basis, and the rates based on the "telescopic" basis were made applicable on "through" distances. For the "telescopic" basis, the rates have been worked out on three "legs", a rate for the first "leg" of 300 miles, another lower rate for the next "leg" of 300 miles, and yet another lower rate for the distances beyond. At the same time a ceiling has been laid down for the rate chargeable per maund irrespective of the distances that may be involved. As in the old

classification, there is a schedule of minima rate also, below which Railways cannot reduce the charges.

Existing Class Rates

The details of the existing class rates are as under :—

(c) Quotation of special and station-to-station rates.

Variations in the classification of a commodity were effected, broadly speaking, by the following methods :—

(a) Alternative owner's risk classifications, on a lower

| CLASS. | BASIS OF TELESCOPIC CLASS RATES. | | | Minimum pie
per maund
per mile. | Maximum pie
per maund
per mile. | Maximum rate
per maund
exclusive of
terminals,
transhipment
and other
extra charges. |
|---------|----------------------------------|------------------------------------|---------------------------------|---------------------------------------|---------------------------------------|--|
| | Pies per maund per mile. | | | | | |
| | For the first
300 miles. | Plus for the
next
300 miles. | Plus for
distance
beyond. | | | |
| 1st .. | ·49 | ·45 | ·40 | ·16 | ·49 | Rs. A. P.
3 4 0 |
| 2nd .. | ·54 | ·49 | ·45 | .. | ·54 | 3 10 0 |
| 3rd .. | ·58 | ·54 | ·49 | .. | ·58 | 4 0 0 |
| 4th .. | ·63 | ·58 | ·54 | .. | ·63 | 4 6 0 |
| 5th .. | ·68 | ·63 | ·58 | .. | ·68 | 4 12 0 |
| 6th .. | ·73 | ·68 | ·63 | .. | ·73 | 5 2 0 |
| 7th .. | ·78 | ·73 | ·68 | .. | ·78 | 5 9 0 |
| 8th .. | ·84 | ·78 | ·73 | ·20 | ·84 | 6 0 0 |
| 9th .. | ·90 | ·84 | ·78 | .. | ·90 | 6 7 0 |
| 10th .. | ·97 | ·90 | ·84 | .. | ·97 | 6 14 0 |
| 11th .. | 1·04 | ·97 | ·90 | .. | 1·04 | 7 6 0 |
| 12th .. | 1·11 | 1·04 | ·97 | .. | 1·11 | 7 14 0 |
| 13th .. | 1·18 | 1·11 | 1·04 | .. | 1·18 | 8 8 0 |
| 14th .. | 1·41 | 1·18 | 1·11 | .. | 1·41 | 9 4 0 |
| 15th .. | 2·11 | 1·41 | 1·18 | .. | 2·11 | 11 0 0 |

The difficulties of the old rating structure were not confined to the general classification and flat basis of rates, but also arose on account of several other deviations from the normal class rates, that had been evolved, and were in force.

Special Devices

As a uniform application of class rates was not practicable on account of several considerations, such as the exigencies of Railway revenue, the ability of various commodities to pay normal tariff rates, etc., a number of special devices came into vogue for the purpose of charging. In the main, these special devices could be divided into three categories as follows :—

- (a) Variation in the classification of a commodity ;
- (b) Application of "schedules", over particular territories, for the movement of commodities or grouping of commodities, etc. ; and

basis, but without the difference in the classification at Railway risk and owner's risk being based on an acceptable and satisfactory basis. This disparity was further aggravated by quotation of reduced rates, within the maxima and minima permissible, at owner's risk. The owner's risk rate being invariably the "effective" rate the disparity between Railway risk and the normal rate was not proportionate to the element of risk involved in a large majority of cases.

- (b) Several Railways notified "exceptional" classifications for a number of commodities at levels higher than the normal class rates, with proper sanction, on account of the special traffic conditions over those Railways, e.g., tea on the Ex-Assam Railway, cotton on the Ex-G.I.P. Ry.

- (c) Several Railways notified similar exceptions to the general classification, but on a basis lower than the normal classifications, on account of similar special circumstances, ex. sugar, hides and skins.

These exceptions in themselves resulted in difference in treatment, and this position was further aggravated by the lack of uniformity in the "effective" classifications over connected Railways for several items of through traffic.

Exceptions eliminated

One of the principal aims of the revision of the Rates Structure was to do away with this unsatisfactory position, which was responsible, in no small measure, for resentment on the part of the commercial community. In the revised classification, these exceptions have been eliminated and whatever deviations from the normal classifications are permitted, have been made applicable on a uniform basis over all the Railways. In determining alternative classifications at owner's risk, an endeavour has also been made to see that the difference maintained bears a reasonable relation to the difference in the degree of the risk undertaken by the Railways. It has also been laid down, as a matter of policy, that when a special rate is quoted at owner's risk, a corresponding special rate should also be quoted at Railway risk, if the trade so desires, maintaining the same level of difference between the two special rates as obtains from the levels of classifications of the commodities in question, in the general classification.

In addition to the device of notifying exceptions to the general classification discussed above, the Railways had also in operation, a list of "schedules," worked out at rates considerably lower than tariff rates, for a large number of commodities. These schedules were generally intended either for the development of traffic or to dispense

with the necessity of quoting a large number of special reduced rates.

There were, in all, 27 schedules adopted by the I.R.C.A., 8 of which were on a "flat" basis and the rest on a "telescopic" basis. The 8 schedules referred to, were to all intents and purposes, additional class rates, pitched below the level of the standard first class rate then obtaining, while the levels of the telescopic schedules were all arbitrarily fixed.

Although these schedules were approved of by the I.R.C.A. that organisation did not possess the authority to enforce the uniform application of a schedule by all Railways for the same commodity or application on a continuous mileage basis. On account of this, several disadvantages and difficulties came to notice and the following were some of the important defects:—

- (1) "Schedule" rates notified by individual Railways did not necessarily apply throughout the length and breadth of that Railway, but were often made applicable only by certain routes and certain areas and not over the other portions covered by the Railway.
- (2) The same "schedule" did not necessarily apply to the commodities in the same class or group over different Railways.
- (3) The same "schedule", in a large number of cases, was applied to commodities in different groups by one or more Railways.
- (4) Some "schedules" applied to small traffic only whereas some applied both to wagon load and smalls.
- (5) Some "schedules" applied at Railway risk and others at owner's risk.
- (6) Some "schedules" applied in local booking only, others in both local and through booking.

- (7) In several cases the level of terminal charges varied with the different schedules.
- (8) There were some cases in which two different "schedules" applied over different sections of the same Railway to the same commodity.
- (9) In addition to the I.R.C.A. "schedules" some Railways had devised schedules of their own construction.

Need for Simplification

These variations in the methods of charging complicated the system very considerably, and pointed very clearly to the necessity for simplification.

Having regard to the need for simplification as well as to the necessities which gave rise to the adoption of these expediciencies, a table of wagon load scales, applicable mainly to primary commodities, was worked out and embodied as an integral part of the revised Rates Structure. The wagon load scales thus evolved may be considered as supplementary to the general classification and providing for the special circumstances and needs of primary commodities.

These wagon load scales are also on a telescopic basis on through distance; and the details of the scales are as under :—

The other special device that was adopted was the quotation of reduced rates between specific points, in local as well as through booking. The utilisation of this device was only limited by the schedule of minima of the class rates and subject to the proviso that the special rates quoted did not amount to "undue preference" in favour of particular parties or trade or "undue prejudice" against particular parties and trades. As long as this limit was not infringed, the Railways had the discretion to quote special rates as often and to the extent considered necessary. Basically, the same position continues to remain even after the revision of the Rates Structure, but with some very essential points of difference.

The first point of difference arises out of the background of inter-railway competition in the past, when two or more points or areas were served by alternative routes. The Railways interested in the movements endeavoured to capture the traffic by competitive rate reductions, with the result that the cheapest rate for a commodity, from one point to another, was not necessarily by the shortest route. This naturally entailed considerable uneconomic haulage of traffic, based on inter-railway competition.

This feature has been completely eliminated in the revised Rates Structure by the adoption of a general rule for the routing of traffic, to the effect

| WAGON LOAD SCALE. | | | BASIS PER MAUND PER MILE. | | | |
|-------------------|----|----|---------------------------|--------------------------|------------------|--|
| 1 | | | 2 | 3 | 4 | |
| W.L/A | .. | .. | 25/100 miles <i>plus</i> | 20/300 miles <i>plus</i> | 15 <i>beyond</i> | |
| W.L/AR | .. | .. | 30/100 " | 25/300 " | 20 " | |
| W.L/B | .. | .. | 43/100 " | 32/300 " | 23 " | |
| W.L/C | .. | .. | 34/150 " | 31/150 " | 17 " | |
| W.L/CQ | .. | .. | 36/150 " | 33/150 " | 18 " | |
| W.L/CR | .. | .. | 41/150 " | 38/150 " | 24 " | |
| W.L/D | .. | .. | 38/300 " | 28/300 " | 18 " | |
| W.L/E | .. | .. | 43/150 " | 32/150 " | 17 " | |
| W.L/F | .. | .. | 43/300 " | 32/300 " | 21 " | |
| W.L/G | .. | .. | 48/300 " | 34/150 " | 19 " | |
| W.L/H | .. | .. | 48/300 " | 35/300 " | 23 " | |
| W.L/I | .. | .. | 43/150 " | 23/200 " | 25 " | |

that traffic must now be booked by the shortest route, and charged by the cheapest route (except of course when the sender voluntarily chooses to select a dearer route). This fundamental change-over has been facilitated by the fact that practically, all the railways came under State management during the recent years, and the number of individual units has been drastically reduced.

In ascertaining the shortest route for movements involving transshipment due to break of gauge, an addition of 100 miles, per transshipment, is made to arrive at the route by which the traffic should be booked. This is obviously based on the fact that while the route miles by a particular direction may be less, the work and the time entailed by the transshipment involved should be fully taken into account.

Another essential difference, which is not applicable to the station-to-station rates only, is the standardisation of the terminal charges. There was no uniformity in the past in regard to the levy of terminal charges. The level of charges was not uniform nor their applicability. Different rates applied to different schedules and there was no stipulation for the levy of terminal charges in addition to the basic rates, when special reduced rates were quoted. All these have been done away with and the charges have been standardised as follows :—

- (1) 8 pies per maund at each end where the Railway has to do the unloading and loading ;
- (2) 6 pies per maund at each end where the consignor and consignees have to load and unload.

These rates apply uniformly to class rates, wagon load scales and to station-to-station rates.

In regard to the levy of transshipment charges too, there was no uniformity in the practice followed previously. These charges have also been standardised and are now levied

at the rate of 2 pies per maund on commodities chargeable on the carrying capacity of the wagon used and 3 pies per maund on other commodities. These charges are leviable for every transshipment point without exception.

Another very important aspect of the revised rate structure is the constitution of the Railway Rates Tribunal, with judicial authority to hear complaints and prescribe remedies. Complaints by the trading public could be made to this Tribunal on the following grounds :

- (a) A Railway Administration is giving undue or unreasonable preference in favour of any particular persons or particular description of traffic.
 - (b) Is charging station-to-station rates or wagon load rates which are unreasonable or rates which are unreasonable owing to any conditions attached to them regarding the minimum weight, packing, assumption of risk or any other matter.
 - (c) Levying charges (other than the standard terminal charges) which are unreasonable.
 - (d) Is unreasonably refusing to quote a new station-to-station rate,
- and
- (e) has unreasonably placed a commodity in a higher class.

BAPALAL'S

RATTAN BAZAR - MADRAS - 3

For

QUALITY DIAMONDS

Phone

2 6 9 6

Grams

"NECKLACE"

"JAIPUR" THE TONE OF AUTUMN SUNSET

~~~~~ R. T. SHAHANI ~~~~~

*Central Railway*

**P**ERHAPS the most important place in this ancient land is the 'tone of Autumn sunset', known as Jaipur. Conveniently situated and accessible both from Bombay and Delhi, it is a 'must' in the itinerary of every tourist. Of course, there are other attractive places in Rajasthan such as Udaipur, Jodhpur and Bikaner which are very interesting; it is at Jaipur that history, man and art have lavished all their attention. The city owes its existence to Raja Jai Singh II honoured as Sawai Jaisingh in token of his great philosophical learning. Jaisingh's main passion in life was astronomy. He had not only studied the subject thoroughly but had applied its principles in the building art. He had a craving for expressing himself in stone. The city of Jaipur is built on the straight line principle, the main streets being as wide as 111 ft. It was Kipling who said later that the good people of America built their towns after the pattern of Jai Singh but knowing nothing of Jai Singh, they took all the credit to themselves.

Perhaps one of the most interesting monuments available in Jaipur is the Jantra or the Observatory. This is the largest among the five groups of Observatories which were built by Jai Singh in Banaras, Delhi, Mathura, Ujjain and finally at Jaipur itself. Jai Singh resorted to masonry as the medium for expression of his ideas and when he was once aroused, there was nothing to prevent him from expressing himself with unbounded energy. A great historian has told us that he "bound the girdle of resolution about the loins of his soul" and then set about his task. The Samrat or the Prince of Dials is a gnomon 90 ft. high, with a

base 147 ft. long. For sheer accuracy, it is difficult to beat this Observatory even today.

The Royal Palace is another place of interest to be seen at Jaipur. Known popularly as Chandra Mahal, it is seven storied in height and hums with activity all day round, for the place is not the mere residence of royalty but contains amongst its four corners shopping centres and market places also with the result that there is life eternal passing in the four corners of its wall. Perhaps the most important feature of the place was the Diwan-i-Khas—the Pitam Nivas (Winter Chamber), Rang Mandir (Hall of Pleasure), and Shobha Niwas (Hall of Brilliancy). All these places and monuments contain superb relics of a past which has vanished today, leaving behind thrills of beauty in their wake.

## Art Treasures

Round about 1803 came to the throne of Jaipur, Raja Juggat Singh, whose wife Ras Caphoor, unfortunately for the State, squandered a lot of crown property. However, the private library of the Rajputs has remained with us. Among the tokens of great value and beauty is a picture of Sir Thomas Roe having an interview with Jahangir in 1616. There are also some old manuscripts in particular, four volumes of the translation of Mahabharata by Abul Fazal, which are today estimated to be worth round about £50,000.

The seductive palace garden is a thing which has attracted the attention of every passing tourist. The Rajputs took their cue from the Moghuls and considering the oppressive heat of the



Rajputana desert for half the year round, they naturally showed a weakness for all cooling devices in summer. The Moghuls built beautiful gardens and made the fullest use of all kinds of methods for ensuring running water. The Rajputs followed their example and built lawns, gardens, artistic shower-baths, small lakes within the palace walls, the entire idea being to keep the place as cool as possible from the heat of the summer. It is stated that Raja Juggat Singh stayed away from the hub and activities of the palace in these lovely gardens and indulged in exchange of letters between the zenana and the garden through the good offices of a favourite dog. There is an interesting monument erected at this spot in memory of this dog. The feeding of birds and animals, pigeons and crocodiles in particular has invited comparison with other parts of the world. For example, the feeding of pigeons is reminiscent of what happens at St. Mark's Square in Venice. There is a special tank laid aside for the feeding of crocodiles and is in fact known as the crocodile tank. Besides, it is at Jaipur that we come across some of the most important relics of the old chivalry of the Rajput regime, particularly in the shape of ornaments and weapons, the former used by the womenfolk and the latter by the men. If you want to see some of the quaint weapons such as arms, knives and daggers and gold and silver embroidered sceptres, there is no better place than Jaipur. The Albert Hall Museum which came into existence in 1876, was designed by Sir Swinton Jacob in Indo-Saracenic style and contains a wealth of relics which are of a fascinating nature.

### Hawa Mahal

Perhaps in Jaipur itself, it is the hall once popularly known as the Hawa Mahal (Hall of Winds) which will catch your attention. Here we have what is known as the Heaven-Darting Tower (Swarga Suli) which was erected by Maharaja Ishari Singh to serve the purpose of seeing without being seen.

This was necessary in the old days when the use of such powerful instruments as telescopes was lacking and when the threat of invasion at the hands of enemies was uppermost in the minds of the kings so that they built towers as high as possible into the sky which enabled them to have a bird's-eye view of the world around them.

Another thing which strikes us at Jaipur is the existence of innumerable and imposing Chatris (Cenotaphs) built by the Rajputs to propitiate the memories of their ancestors and incidentally themselves. This was one way of immortalising their remains and keeping fresh in the minds of the people, the memories of their illustrious ancestors. The imposing structures found in the shape of domes supported on pillars and rich in carvings detailing almost all the epics from Hindu religion. They were of distinctive designs and one of the best survivors of this art is that of Jai Singh II himself.

### Serene City of Amber

A few miles away from the hubbub of Jaipur City lies Amber, a mass of majestic ruins, built on a hill-top, a city set on a hill as it is popularly known. As an eagle's nest up the Kali Koh gorge, it is imposing in its solitude and is almost reminiscent of Akbar's Fatehpur Sikri, for, like Fatehpur, it is abandoned at present and apart from its historical antiquities, there is very little of life in this place. Formerly, the last two miles of the journey were undertaken on the back of elephants. Now a beautiful motorable road has been built and the journey can be performed in comfort.

There is a certain warm beauty about the Amber Castle which is elevating; a peculiar warmth which however inspires a certain amount of awe in the visitor. There are several cubits to its stature. There is intricate workmanship, particularly on the bronze doors which are of exquisite value and amidst the walls of Amber



The Serene City of Amber.

resides the slumbering spirits of the past. Towards the 60's of the 17th century, Mirza Jai Singh I built this city of Amber, and boasted about its construction which incidentally reached the ears of Aurangzeb at the court of the Moghuls. Aurangzeb was naturally indignant at the idea that a small prince like Jai Singh should boast of any structure superior in elegance to anything the Moghuls had hitherto produced. The Moghul wrath came down on Amber but Jai Singh I covered the red-stone pillars with a stucco over-all plaster and when the forces of Aurangzeb advanced, they saw that an exaggerated version had been conveyed to them. This in effect saved Amber from total destruction.

The ruling deity of Amber is the goddess Kali in whose memory a small temple has been built. The place itself is a maze in which one is likely to get

lost. There are, however, beautiful paintings on the walls of the palace and there is a remarkable combination of the spiritual and material pervading the entire spirit of the workmanship at Amber.

A visit to Jaipur brings back to your mind the ancient glory of the Rajputs and gives you an insight into a way of life which is fast disappearing. The Rajputs had certain traditions, chivalry, honour, patriotism, a high sense of respect for women and so on. There was also a lot of colour and pomp and pageantry in the enlightened despotism practised. With the passing of the princes and the transfer of power to the people, much of that side of life has necessarily perished, which cannot be helped. But then, if you have succeeded in having a glimpse of a section of India of yesterday, you would have learnt a good bit of life,

## SOUTHERN RAILWAY

### TENDER NOTICE.

**Quilon-Ernakulam Railway Construction—Section I—Quilon to Mavelikara—Reach II—From mile 6 to 12 from Quilon End towards Kottayam.**

The Chief Engineer, Southern Railway, Park Town, Madras-3, invites separate sealed tenders for

**Earnest Money.**

1. Forming random rubble retaining walls in water in Peruman Kayal and Edachal Kayal ... **Rs. 1,250**
2. Sand blanketting in Munro Thuruthu ... **„ 1,150**

**upto 12-00 hours on 16th June, 1954.**

Tenders should be in the prescribed form obtainable from the Chief Engineer's Office, Southern Railway, Park Town, Madras-3 or from the Executive Engineer's Office, Quilon-Ernakulam Railway, Ernakulam South, upto 12-00 hours on 15th June, 1954, on production of a receipt from the Financial Adviser and Chief Accounts Officer, Southern Railway, Park Town, Madras-3 or from the Station Master, Ernakulam South, towards the cost of tender forms at the rate of Rs. 10 per each set of tender forms and Rs. 2 per spare schedule, only if available, which amount will not be refunded.

Earnest money, as noted against each work, is to be paid to the Financial Adviser and Chief Accounts Officer, Southern Railway, Park Town, Madras-3 before 12-00 hours on 14th June, 1954.

Income-tax Clearance Certificate should be attached to the tender.

The tenders will be opened at 11-00 hours on 17th June, 1954.

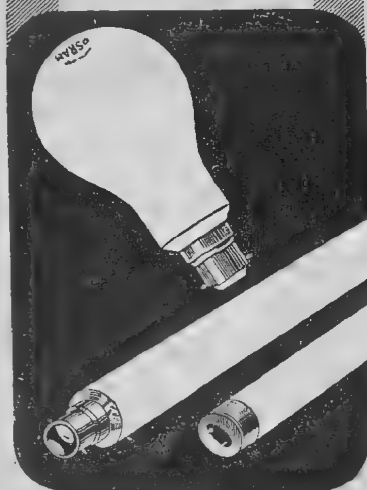
The Chief Engineer does not bind himself to accept the lowest or any tender.

# Light... more Light

WITH

## Osram

LAMPS &  
FLUORESCENT  
TUBES



## Osram

the wonderful light

A  
**S.E.C.**  
PRODUCT

THE GENERAL ELECTRIC CO.  
OF INDIA LTD.

Representing :  
THE GENERAL ELECTRIC  
CO. LTD. OF ENGLAND

GEC 3963

---

## RECENT IMPROVEMENTS IN SOUTHERN RAILWAY PASSENGER COACHES

---

[The construction of a modern railway coach is a precision job and on the care bestowed on its design and assembly, depends the safety and comfort of the travelling public. While on the one hand endeavours have to be made to reduce the possibility of carriages telescoping in the event of an accident, continuous attention has to be paid on improving the standard of passenger comfort in coaches every time a new design is conceived. As regards coaches already in service, they cannot obviously be neglected and many improvements have to be introduced from time to time to raise their standard to the level of new coaches. The following write-up will give readers an idea of improvements recently introduced in passenger coaches on the Southern Railway.—Ed.]

### Accommodation

Coaches built on the 1953-1954 Programme and onwards will have a wider body, i.e., 10'-8" on Broad Gauge and 9'-0" on Metre Gauge. The depth of seats in these coaches is widened to 23" in III class compartments to give greater comfort on the journey with a knee space of 21" between two rows of seats. Wider doorways are being provided to provide easy access into the compartments. The lavatories have been widened in accordance with the standard passenger amenities laid down by the Railway Board. The number of passengers have also been limited to 20 in each compartment to ensure greater comfort.

### Other Amenities

Every III class compartment is now being provided with fans on a programmed basis. Luggage and parcel racks are also provided so that more space may be available on the bunk itself, and this space may be conveniently utilised by some for taking rest during nights. Each lavatory in III class compartments is now being provided with the following:—

1. Flush-out stainless steel latrine pan.
2. Corner washhand basin
3. Coat hook
4. Mirror and shelf
5. Bottle opener

6. Towel rack
7. Lotah tap and shelf
8. Commode rail.

In the III class ladies' compartments, mirrors are provided on lavatory doors also.

In the upper class lavatories, 50 per cent of II class are provided with flush-out pan, Indian style, with Lotah cock and shelf arrangement and 50 per cent with flushing commodes.

### Security Devices

All the upper class windows and side-doors are being provided with 4 window bars in addition to the safety catches for the side-doors and shutters. III class ladies' compartments are also fitted with 4 window bars with safety catches as mentioned above in addition to door latches or bolts. Lavatories of all classes are also fitted with 4 window bars.

### Lighting in Compartments

The existing lighting is being improved in compartments and provision of night light is being made in the III class compartments, as the coaches pass through shops so that roof lights may be switched off during nights. Embarkation lights are provided in the body sides of upper class coaches,



Exterior view of Third Class Tourist Car.

### New Third Class Tourist Cars (Broad Gauge)

As a further amenity for third class passengers, the Southern Railway has recently constructed two new III class tourist cars, mainly intended for the convenience of pilgrim parties travelling on the Broad Gauge.

Each of the cars has a total seating capacity for 38 passengers and is divided into three main compartments with seating accommodation at both the end compartments for 15 passengers each. In the centre compartment, primarily intended for the use of the ladies of the party, provision has been made for accommodating 8 persons with complete privacy. Each end compartment has been provided with two lavatories (flushout) and a bath room. The bathrooms have shower roses fitted to the ceiling and taps at a suitable height under which a person can sit and take bath comfortably if the ceiling shower roses are not preferred. Stainless steel wash-basins have been provided in the lavatories. For the ladies' compartment, one bathroom and

a lavatory have been provided with similar arrangements.

A kitchen, fitted with a cooking stove, has been provided wherein all meals required on the tour can be prepared. In the corridor near the kitchen, two folding bunks have been provided and these can be made use of by the cook or the servant during night.

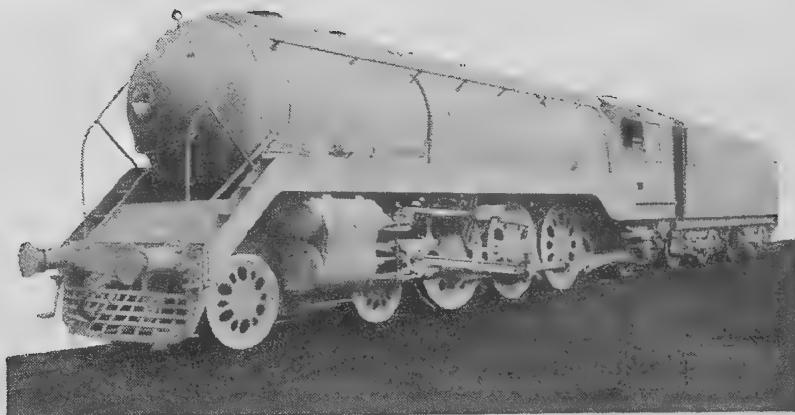
One other facility provided in this car, specially intended for Indian requirements, is a room where clothes can be washed and utensils cleaned.

All the compartments have been provided with ceiling fans and lights (including blue lights) for use at night and the seats have been provided with cushions. A shell type cupboard has been provided in each of the end compartments for keeping clothes, etc.

Safety catches have been provided on all windows and locking devices on all side-doors in addition to external window bars. Twenty windows have been provided on either side of the car to enable passengers to have a clear view of the scenery during the journey.







## PROBLEMS OF A LOCO MAN

### (1) SHED LAY-OUTS

C. CHALAPATI RAO

*Eastern Railway*

**T**HIS is a subject on which volumes have been written and can be written. I propose to discuss this subject purely from my impressions of the various sheds I have come across and on the assumption that Loco-sheds should be such as to facilitate a quick turn round of engines in shed and at the same time providing sufficient covered accommodation for repairs to Locomotives based in the shed. As I am limiting the considerations, naturally my discussions will be brief.

Before we take up this subject let us first find out what are the various movements of an engine in a shed. These are :—

- (a) Engine after working a train has to be brought into shed on the incoming line.
- (b) Engine is to be examined.
- (c) Engine is to be coaled.
- (d) Engine is to be taken to the fire cleaning pit.
- (e) Engine is to be turned if necessary.
- (f) Engine is to be repaired if necessary.

- (g) Engine is to be placed for the out-going driver's examination.
- (h) Engine is to be watered before she goes on the out-going line.
- (i) Engine is to be taken to out-going line for traffic use.

From the above it will be seen that there is a sequence of operations through which an engine goes through in a shed before she is available for traffic again. All these operations put together are known as the "turn round" of an engine in shed. Except item (g), for all the other items the time limit is more or less fixed depending on the lay-out of the shed. To achieve a quick turn round it is, therefore, necessary to have a proper lay-out so that movements are quick and at the same time safe. For this, the movements should be unidirectional as any cross-movements result in delays and accidents.

#### Examination Pits

To start with, the incoming and out-going lines should be separate. After an engine comes in, there should

be no delay in placing the engine on the Examination Pit as I have found that this is one of the main reasons for incorrect booking of repairs because a tired crew wants to sign off as quickly as possible and delays only irritate them and make them careless. The examination pit or pits should therefore be provided to take 3 to 4 engines at a time in large sheds and at least 2 engines at a time in small sheds. The examination pit should be well illuminated for proper examination at night and should have proper gauges and tools provided close by to enable examining staff to do their work properly.

After examination, the engine goes on to the coal stage. This is a stage where considerable delays take place specially in sheds where hand coaling is done. It must be remembered that coal stage accommodation is not only for coaling of engines but has also to be utilised for placing of coal wagons for unloading. The ideal arrangement would be to have separate lines for placement of coal wagons and separate lines for movement of engines on coal stage. A four line coal stage for hand coaling and a five line coal stage for use with a grab or bucket steam crane is what is required. The two outer lines will serve for placement of coal wagons and the two or three inner lines for loading of coal into tenders. As coal supplies are irregular at most of the places, sufficient stacking accommodation should be provided at the coal stage.

After coaling, the engine goes on for fire cleaning. This is another place where delays can be avoided if sufficient pit accommodation is provided. When fires are cleaned, pits get jammed with ashes and until the ashes are removed, fire cleaning on engines following becomes a difficult job. Fire cleaning pits should be long enough to accommodate 3 to 4 engines at a time. There should also be a line adjacent to the fire cleaning pits to accommodate ash wagons. Quick disposal of ashes is one of the main problems of a shed and unless sufficient attention is paid to the

subject, the cleanliness of a shed cannot be properly maintained. Fire cleaning pits should not be located close to the coal stage as any ashes getting mixed with the coal affect the engine performance considerably.

### Turning of Engines

The next thing to be done to the engine is to turn it if necessary. Either a turn-table or triangle is used for the purpose. A good power-operated turn-table is preferable to a triangle as engines can be turned quicker. As turning is always not necessary, an avoiding line should be provided on which engines not requiring turning can proceed.

From the turn-table line, engines have to be brought into shed for repairs if necessary. The lines should be so laid out that engines can go into any line in the shed as lines inside the shed are earmarked for definite jobs. When no repairs are to be done, the movement of an engine should be on a line running round the shed as it is uneconomical to provide covered accommodation for this movement.

The next stage is to place the engine for out-going driver's examination. This should be on a pit line outside the covered enclosure of the running shed. A large number of pit lines are to be provided to enable several engines being placed simultaneously. This place should also be well illuminated to enable drivers to examine engines properly at night before leaving shed. The pits and surroundings should be absolutely clean to enable drivers to make a proper examination.

After the driver examines the engine and before he goes on the out-going line, he has to fill the tender with water, and make the fire. For this purpose two water columns and two pits are to be provided at each end of the shed to enable two out-going engines being dealt with simultaneously. At busy sheds, several late starts have occurred due to inadequate water columns and pits,

### Covered Accommodation

I have dealt with so far with the turn round of an engine. Let us now examine what is the covered enclosure required for repairs to engines. 12 per cent of the engines based in a shed are usually provided for repairs. Assuming another 8 per cent are to be brought into shed for non-schedule repairs, the covered accommodation in a shed should be for 20 per cent of the engines based in the shed. It goes without saying that all lines inside sheds should be pit lines as pits are essential for repairing engines. From experience I have found that it is always better to earmark separate lines for wash-outs, scheduled repairs and non-scheduled repairs as any mix up causes confusion and delays. Provision should also be made inside the shed for drop pits as in a running shed it is frequently necessary to drop wheels for attention to boxes, horns and wheels. For quick and efficient repairs, there should be at least two drop pits in each shed with a small bit of track in between the drop pit lines for running the wheels dropped. At sheds, where Maintenance Overhauls are done, provision should be made for a separate shed with electric hoists. Where steam cranes are used for lifting engines for the purpose of doing maintenance Overhauls, no useful purpose will be served by providing a separate shed as lifting operations have to be done in the open and therefore repairs have also to be done in the open.

### Machine Shop

Attached to a running shed, there should be a well equipped Machine shop. Capital expenditure for providing proper machines pays in the long run as with proper machine tools considerable delays to engines can be cut out. There is a tendency that since the work in a running shed machine shop is purely jobbing work, any old machine will do and this tendency has resulted in poor maintenance and delays to

engines. The following machines are essential in a running shed :—

- (1) A large sized lathe to machine piston heads, axle boxes, etc.
- (2) One or two small lathes to machine Boiler mountings, frame mountings, etc.
- (3) A shaper large enough to machine side liners of axle boxes.
- (4) A small sensitive drill.
- (5) A fairly large radial drill suitable for boring operations also to bore coupling rod bushes, big-end bushes, etc.
- (6) Emery grinders for tools.
- (7) An Air Compressor for operating pneumatic tools.
- (8) An Electric Welding Plant.
- (9) Oil fired white metalling plant.

Apart from the above machines, in a large shed where maintenance Overhauls are done, a wheel lathe should also be provided. It is advisable to provide machines with independent motor drives instead of belt driven machines.

In addition to the machine shop, provision should be made in the shed for Blacksmith's forges, Carpentry bench and Tinker's bench. It is better to provide for the above three items outside the shed in a separate covered enclosure to enable the repair shed to be kept clean. . . .

A running shed, which deals with engines mostly with oil lubricated axle boxes, requires a waste soaking plant.

### Stores

Running sheds are incomplete without a properly equipped Stores. A good system is to have a main stores for stocking the various consumable and non-imprest items and a subsidiary stores for issue of stores to running staff and for keeping certain important and fast moving consumable stores to repair engines after main stores are

closed. The main stores should have an out-door fenced yard for keeping heavy material. The main Stores should be well illuminated and properly ventilated with bins to take the various items. The bins should be so arranged that stores can be inspected at a glance walking round the room. In several stores I have seen items kept high above and to inspect these, ladders are necessary. Such stores are always inefficient as what cannot be seen at a glance is assumed to be all right. Storing of oils should be preferably done in big cylindrical tanks and not in drums as pouring out oil from drums results in considerable wastage and the drums also occupy a lot of space.

Supervisory staff and office staff require proper office rooms. The Loco Foreman's room should be so situated that sitting in his room he can see how the engine movements in the shed are taking place. Most of our sheds lack

a proper time-office. This is a great handicap as without a proper appreciation of the labour position in the shed, it is very difficult to plan the work for the day.

If necessary facilities as stated above are provided and sufficient attention is paid to maintenance of locomotives, it should not take more than 3 hrs. to turn round an engine. To this if we add 2 to 3 hrs. for doing some petty repairs, normally engines should be turned round within 5 to 6 hrs. In sheds where more time is taken, a proper examination of shed movements and maintenance schedules will reveal the various shortcomings of the shed. Loco officials in charge of sheds should carefully study the lay-outs of the shed or sheds under them as a quick turn round of engines is one of the most important duties of a Loco official.

*(To be continued)*

*(Continued from page 21)*

### **Electrification of Railways**

Merz & McLellan, and was found financially justified. On recent demands from public for this section to be electrified, a further technical survey for electrification with necessary financial implications is under preparation and active consideration.

The traffic on the suburban section has increased considerably and to cope with the additional services introduced, the proposal to electrify the third steam track between Madras Egmore and Tambaram has been approved and the work is being taken in hand during 1954-55 and 1955-56. This will facilitate the running of goods and such other through services as now hauled by

electric locomotives between Madras Egmore and Tambaram on the third line without interfering with the suburban services. If and when the electrification of the Tambaram—Villupuram section materialises, the electrification of the third line will simplify operational and other technical considerations.

It may not be out of place to mention here that in response to the growing demand for electrification of Railways, the Railway Board has constituted an Expert Electric Traction Advisory Committee for scrutinising all schemes for electrification to facilitate decision by the Railway Board.

Phone : 2 6 9 6

Grams : " NECKLACE "

**B A P A L A L ' S**

RATTAN BAZAR, MADRAS-3

For GUARANTEED JEWELLERY, GOLD & SILVER ARTWARES

# WATCH AND WARD OR POLICE? THE REAL NEED

Speech made by

Sri V. SATHIAVAGISWAR, M.A.,

*Superintendent, Watch and Ward, at the Officers' Forum*

**A**T present in the Railways in India, the very important duties of prevention and detection of property offences are attended to by :—

- (i) The Government Railway Police not responsible to the Railway Administration,
- (ii) The Watch and Ward Department, responsible to the Railway Administration, but without the required powers or privileges or legislation which could render them really useful and effective, and
- (iii) The preventive squads of the allied Railway Departments which are no better.

It is common knowledge that co-ordination among the three services, to put it bluntly, is far from satisfactory.

In contrast with this set-up in the Indian Railways, a brief account of the substitute to these Organisations which has been in existence in the United Kingdom may be interesting. The substitute for the Railway Police, the Watch and Ward and the preventive Squads of our Railways, is the one Organisation, viz., the British Transport Commission Police.

The Railway Police in Britain date from the days when the Railways were under construction, when it was found necessary to :

- (a) preserve law and order,
- (b) protect the Railways from damage by subversive elements, and
- (c) prevent and detect the thefts of goods and parcels in transit by rail.

The Railway Police enforce the law in common with all other Police Forces in the country, but they are not subject to the control of the Home Office. The cost of the Railway Police is borne solely by the Railway undertakings.

The Transport Act, 1947, transferred the ownership of the Railways from the four companies to the British Transport Commission and in consequence the Police Forces of the former independent companies were completely reorganised into one large Force.

The British Transport Commission has delegated the function of running the Railways to the Railway Executive and for operational purposes the Railway System of the country is divided into six Regions.

The Police Force of each Railway Region is controlled by a Chief of Police and the Police ranks in each area as follows :—

|                                    |                    |
|------------------------------------|--------------------|
| Chief of Police,                   |                    |
| Assistant Chiefs of Police,        |                    |
| Divisional Police Superintendents, |                    |
| Chief Inspectors                   |                    |
| Inspectors                         | } Male and female. |
| Sergeants &                        |                    |
| Constables                         |                    |

The Inspectors, Sergeants, and Constables may be uniformed or detective officers according to the type of work on which they are engaged.

## Powers and Jurisdiction

The British Transport Commission Act, 1949, invests the Police with powers of arrest, search and seizure of any property suspected to be stolen.



In general, the Railway Police are empowered to do everything that all other Police Forces can do to prevent and detect crimes.

### Prosecutions

In 1949 the British Transport Commission Police prosecuted 33,067 persons for various offences including theft and receiving, ticket frauds, trespass, wilful damage, assault, construction, indecency and by-laws.

### Uniform and Equipment

In general, the uniforms and equipment are similar to those issued to all British Police Forces.

### Discipline

The highest standard of discipline is expected and enforced.

## PROPOSAL FOR INDIAN RAILWAYS

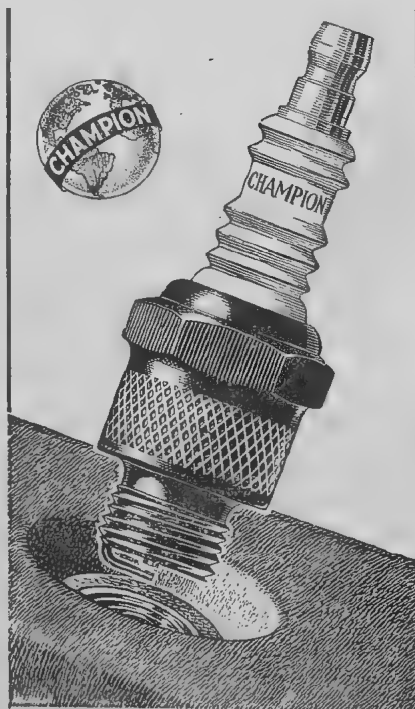
It may be worth considering whether a similar system could not be introduced in the Indian Railways as well, especially along with the Re-grouping of the Railways on a regional basis by amalgamating into one Railway Transport Commission Police, the overlapping and admittedly defective services in the Indian Railways at present, viz., the Railway Police, the Watch and Ward and the Claims Preventive Squads.

The Combined Transport Commission Police of each Railway could be invested with the powers and privileges of the regular Police Force, subject to the Police Act, Rules and Standing Orders.

The said Transport Commission Police Force should be placed directly under a Chief of Police of the Railway concerned, responsible to the General Manager for the efficiency and work of the Police Administration, while establishing close liaison with the Police Force of the concerned State Governments,

It is also for consideration as to whether the introduction of this system will be tackling the problem in a direct and effective manner on the model of the organisation in vogue in the United Kingdom, with a view to the

- (i) efficiency
- (ii) economy
- (iii) proper co-ordination
- (iv) proper liaison, especially in view of the strongly felt need by all the Indian Railways to safeguard more effectively person and property, from the activities of subversive, violent and undesirable elements.



**CHAMPION SPARK PLUGS**  
Distributors for  
South India & States  
**RANE (Madras) LTD.**  
PATULLOS ROAD, MADRAS-2



## TAMBARAM SCHOOL CELEBRATES PARENTS' DAY

A pleasant function with a variety programme of a dozen items was held on Saturday the 24th April, 1954, in the Christ King Higher Elementary School at Tambaram situated in the heart of the Railway Colony. Mr. R. V. Subrahmanyam, Senior Officer (Movement), Southern Railway, Madras, presided over the function and gave away the prizes.

The school, which is a Higher Elementary School, has nearly 700 children on its rolls at present, most of whom are sons and daughters of railwaymen. The institution which is run by the Apostle Mission is meeting the growing needs of the Colony of Railway employees in the matter of education. The elite of the Railway Colony was present at the prize distribution and witnessed the nice dramatic skits enacted by the children.

"Babies' Troubles", a nice skit by children, was loudly cheered by the audience.

The "Sneezing Powder", a short English drama, was a humorous piece which made the audience roar with laughter. The main parts in this drama were played by two sisters Sarada and Shyamala, daughters of a Head Clerk in the Operating Department,

'Prithiviraj', a drama in Tamil, kept the audience spell-bound. The role of Prithiviraj was played by Janakavalli, the daughter of a Head Clerk in the Chief Commercial Superintendent's Office. Another important role was played by Radha, daughter of the stenographer to Chief Commercial Superintendent.

Nearly 80 prizes to the children for good conduct, general proficiency, moral science, Tamil, etc., were given away. The President, Mr. Subrahmanyam, in his concluding remarks, stressed the need for co-operation between the parents, the management and the children in moulding the character of the pupils. A message wishing the function all success was received from Mr. S. R. Sarma, our Chief Operating Superintendent.

## TAMIL DRAMA AT RAILWAY INSTITUTE, TRICHINOPOLY

Members of the Arts Section of the Railway Institute, Trichinopoly Fort, staged at 7 p.m. on the 10th April 1954 "ILLAL", a drama in Tamil by Pudevai Ramalingam. Pulavar T. S. Kulandaivelan of St. Joseph's College High School, Trichinopoly, presided. There was also a dance performance by Kumaris Revati and Sakuntala. The following are photos taken on the occasion,



**Sitting**—(1) E. H. Srinivasa Rao, (2) S. Sudarsanam, (3) R. Dheenadhayalu (Hon Secretary), (4) N. Ganesa Rathnam, (5) E. Radhakrishnan.

**Standing**—(1) T. Govindasami (Director), (2) F. W. Muthiah, (3) C. M. Ramachandran, (4) T. R. Srinivasan (Stage Director), (5) T. K. Sikamani (Asst. Stage Director), (6) V. Sangili (Asst. Stage Director), (7) A. Francis Xavier (Associate Director).

TOOLS THAT WE OFFER  
TOOLS THAT YOU WANT

FOR YOUR

- (1) **FACTORIES** -
- (2) **MILLS** -
- (3) **COLLIERIES** -
- (4) **TEA GARDENS** -

*Let us quote better price for  
better quality*

**THE  
CALCUTTA SMALL TOOLS CO.**  
**30, STRAND ROAD,  
CALCUTTA-1.**

For the convenience of passengers  
travelling in trains, OUR  
VENDORS travel with you to  
serve our high class Aerated  
Waters and Cool Drinks.

\*

*You please call them*

**VINCENT & CO., LTD.**  
**TIRUCHIRAPALLI**

AND

Branches

AT

Madras, Mathurai, Coimbatore, Salem,  
Tirunelveli, Karaikudi, & Kumbakonam

*Associate Branches:*

Dindigul & Kodaikanal Road



**Sitting**—(1) N. Rajagopalan, (2) D. S. Ramankutty Nair, (3) S. Sudarsaniam, (4) E. Radhakrishnan, (5) T. Govindasamy (Director), (6) A. Francis Xavier (Associate Director), (7) N. Ganesa Rathnam, (8) E. H. Srinivasa Rao, (9) S. Sundaresan, (10) F. W. Muthiah.

**Standing, 1st Row**—(1) K. Balakrishnan, (2) Shaik Ibrahim, (3) C. Ponniah Pillai, (4) C. M. Ramachandran, (5) S. Prabhakaran, (6) K. Anwer Baig, (7) S. Ramakrishnan, (8) M. Natesan, (9) V. Sangili (Asst. Stage Director), (10) T. K. Sikamani (Asst. Stage Director).

**2nd Row**—(1) A. Krishnamurthi, (2) T. S. Panchapakesan, (3) T. R. Srinivasan (Stage Director), (4) S. P. Lakshmipathy.

### TAMIL SANGAM, GUNTAKAL

The above Sangam, formerly known as the Sanmarga Sangam, was started in December 1949. The object of the Sangam is to provide a venue for the Tamilians of Guntakal to enjoy the benefits of Tamil literature and to enable them to establish cultural contacts with the people of the Andhra State. The following are the activities of the Sangam :—

(i) Weekly Talks by the Members of the Sangam ;

(ii) Conducting literary classes like 'Tirukkural' classes ;

(iii) Arranging lectures by eminent scholars on Tamil and other languages ; •

(iv) Rendering Social Service ; and

(v) Celebrating the birthdays of Poets like Bharathi, Thiruvalluvar, Kambar, etc.

Phone :  
2696

**BAPALAL'S**

RATTAN BAZAR, MADRAS-3

For QUALITY DIAMONDS

Grams :  
"NECKLACE"



## WATCH AND WARD ANNUAL DAY CELEBRATIONS

**T**HE Watch and Ward Annual Day Celebrations were held at the Railway Institute Grounds, Perambur, on 24th April 1954, with great eclat. There was a large gathering of officers and staff of the Railway including a record gathering of Watch and Ward personnel of the Southern Railway. Sri T. A. Joseph, General Manager, presided and Srimathi Joseph presented the prizes.

### Ceremonial Parade and Band Tattoo

The Celebrations started at 16-30 hours with a ceremonial parade. The General Manager Sri T. A. Joseph took the salute. The Watch and Ward Brass Band and Bag Pipers turned out in their ceremonial colours. The tattoo was a good show.

### Physical Training Demonstrations

The demonstration in keeping with the music by the band was well appreciated by the spectators.

### Sports—Races

- (1) 1,500 Metres Running Race (open to all Colleges and recognised Institutions).  
Five competitors took part.

#### PRIZE WINNERS

- (1) Sri Shunmugham, Southern Railway Athletic Club, Perambur.

- (2) Sri A. K. Raman, Vivekananda College, Madras.

- (3) „ D. Subramaniam, Chromepet Club, Chromepet.

### (2) 110 Metres Hurdles—

#### PRIZE WINNERS

- (1) Sri Balasubramaniam, Trichinopoly.

- (2) „ A. Bastian, HQ Unit.

### (3) Obstacle Race—

#### PRIZE WINNERS

- (1) Sri G. Venkatarajan, HQ Unit.

- (2) „ M. P. Narasimhalu Naidu, Bangalore.

### (4) 100 Metres Race—

#### PRIZE WINNERS

- (1) Sri G. Venkatarajan, HQ Unit.

- (2) „ P. V. Pandarinathan, Trichinopoly.

### Team Events

#### (1) Tug-O-War—

The two teams were well matched and either side looked like winning for some time. The Mysore Region pulled successfully the Trichinopoly Region in two straight pulls.





Sri T. A. Joseph, our General Manager, addressing the gathering.

**(2) 4 × 400 Metres Relay Race—**

The Headquarters Unit, Golden Rock, won the event in 4. minutes 20 seconds followed by the Trichinopoly Region finishing second and the Madras Region a fair third.

**(3) Relay Race for Ministerial Staff—**

**WINNERS :**

1. AWW's Office, Royapuram.
2. SWW's Office, Golden Rock.

**Winners in other Team Events**

**(1) Drill Competition—**

Commander Subedar Sri R. Seshachalam, Trichinopoly Region.

**(2) Inter-Regional Football Tournament—**

**WINNERS :**

Captain Sri G. Thakiyuddin, HQ Unit.

**RUNNERS UP :**

Captain Mr. Mohd. Iqbal.

**(3) Inter-Regional Hockey Tournament—**

**WINNERS :**

Captain Sri T. A. Paris, Trichinopoly Region.

**RUNNERS UP :**

Captain Sri T. Meyers, Madras Region.

**Other Events**

**(1) Seal Check Race—Havildars—**

1. HW. Murtuza, Trichy Region.
2. HW. Srinivasan, Madras Region.

**(2) Disguise Competition—**

1. Sri T. Subbiah, Bangalore (dressed as singer) and party.
2. „ A. D. Kosalram and party, Golden Rock.

**(3) Band Race—**

1. Sri A. S. Raju.
2. „ S. Pancrace.

**(4) Invitation Race—(Open to all guests)**

Mrs. V. Sathiavagiswar and partner.

**(5) Sack Fight—**

1. Jamadar Sri P. V. Padavetti, HQ Unit.
2. Jamadar Sri I. V. Narayana-swamy, HQ Unit.



Srimati T. A. Joseph giving away the prizes.

IF YOU MUST PLAY THE GAME

YOU MUST READ

## **SPORT & PASTIME**

Whatever the game—indoor or outdoor—**SPORT & PASTIME** has something interesting and instructive to give. It has features to interest you and other members of the family.

Published on Saturdays—Price 6 As. a copy

by Messrs. Kasturi & Sons Ltd., Proprietors of **THE HINDU**

From all News Agents or direct from **THE MANAGER,**

**“SPORT & PASTIME”**

**MOUNT ROAD, MADRAS**

**(6) Jamadars Dressing Race—**

1. Jamadar Sri I. V. Narayana-swamy, HQ Unit.
2. Jamadar Sri A. K. Govindan, Madras Region.

**Championship Shield**

The Championship Shield was won by Trichinopoly Region.

**Prizes to Best Detectives**

1. Sri N. Krishnamurthy, Detective Inspector—*Sporting Stick*.
2. „ S. Andiappan, HW, Tiruppur—*Medal*.
3. „ V. H. Havanur, Sepoy, Hubli—*Medal*.
4. „ S. Michael, Sepoy, Trichinopoly—*Medal*.

**Side Shows**

Weight lifting by Mr. Frederick Japhet, Madras, and the classical poses and muscle control by Sri Janardhana Rao, B.A., B.Sc., “Mr. Madras State” 1953 Height class winner in Bharat Sree Contest in 1952 and “Mr. As’a” Contest in 1951 gave finishing touches to the celebrations of the evening and was much appreciated by the audience.

Mr. T. A. Joseph, our General Manager, speaking on the occasion, said:—

On the occasion of the celebration of the 3rd Annual Day of the integrated Watch and Ward Force of the Southern Railway, I would like to convey to the officers and all ranks of the Force my warm appreciation for the manner in which they have carried out their increasingly onerous duties of prevention and detection. It is common knowledge that while doing such duties the staff have at times to work hard and often find themselves in unhappy situations, but from the record of their work, there is cause for every satisfaction that all ranks have borne the brunt of their responsibilities well and done the work allotted to them with a commendable sense of duty and efficiency.

In this Force, as in other organisations, there have been cases where disciplinary action was called for. It is a matter for satisfaction that those in charge of the

Administration of the Force have done well in maintaining a sense of devotion to duty, and discipline among all ranks by prompt appreciation of good work coupled with firmness where required.

I congratulate all concerned on the good work done and the prize winners. My best wishes to the Force for the ensuing year.

Mr. S. R. Kalyanaraman, Chief Commercial Superintendent, then addressed the gathering as follows:—

Sports meets and speeches do not ordinarily go together; but on the occasion of the Watch and Ward Annual Day, it has become traditional for the C.C.S., as the nominal head of the Watch and Ward Force, to give a brief summary of the activities of the Force during the previous year and to indicate also what changes, if any, are contemplated for the year to come.

This year I have certain additional points to speak about, points to which I can refer with pleasure.

We have, for the first time with us, Sri T. A. Joseph, our General Manager. He has been with us before, but this is the first time he is with us as our General Manager, and I welcome him.

The Watch and Ward Force has functioned with excellent team spirit during the year under review.

Sri Sathiavagiswar is the real head of the Force and he has carried the burden well, so well in fact that really I have had very little to do. He has been ably assisted by Messrs. Platel, Khasim and Rugson.

I do not want for a moment to suggest that there are not many others in the Force, who have done excellent work. As a matter of fact, it is very embarrassing to me to mention names on this occasion, because almost every one in the Force has worked very well.

The statistics of crimes speak volumes about the performance of the Watch and Ward Force.

I must mention specially, however, the name of Detective Inspector Sri N. Krishnamurthi. His services have been really outstanding. I had a baffling case in my hand. I knew that something very unsatisfactory was happening, but did not know where and how to locate it. You will be surprised to hear the details of the case.

A number of people, responsible in public life, saw me and told me that they had booked boxes of luggage to Calcutta. Howrah, Asansol and other places; and, when at the destination, they took delivery of these boxes,

they found them outwardly alright. But on opening the boxes at home, they found all the valuables therein missing.

I asked Sri Sathiyavagiswar to give me a good Inspector to investigate into these cases. He recommended Sri N. Krishnamurthy. I entrusted the job to him, but I felt at the same time that the results may not be promising. Actually the results were indeed very very satisfactory and the Inspector was able to locate the culprits and the scene of occurrence with reasonable certainty.

There have also been a number of other cases ably handled by Sri Krishnamurthy, with the details of which I do not want to tire you.

I am certain that there are also others in the Force with equal or nearly equal ability. They have, however, not come to notice. I do hope that they will also perform similar services evoking our appreciation.

It is not that only the literate or Class III staff of the Watch and Ward Force have done outstanding work. Some of the Class IV staff also have done excellent work. In recognition of such work, on this occasion it is proposed to make an award not only to Sri N. Krishnamurthy, but also to three members of the Class IV staff selected as having done very good work, namely, Havildar Andiappan of Royapuram Region, Sepoy Michael of Trichinopoly Region and Sepoy Uthappa of Bangalore Region. I wish to convey to the men my appreciation of their good work.

I thank the whole Force for their performance in the past and I am certain that in the years ahead, the Force will continue its good work.

## BAPALAL'S

RATTAN BAZAR  
MADRAS-3

\*

For Silver Trophies, Cups,  
Medals and E. P. N. S. Wares

\*

Phone :  
2696

Grams :  
"NECKLACE"

## MADRAS FOOTBALL

After two drawn games, the Southern Railway, Perambur, beat Tanjore United Club by two goals to one in the Invitation Football Tournament at the Stadium on May 10.

There was little difference between the teams, and the Railway's victory was due to their opportunism. In the previous matches, Tanjore had played lively football, but their display was poor. The Railway, on the other hand, worked hard and their dash and thrust enabled them to command more of the exchanges.

The Railway took the lead a few minutes before half-time. Govindaraj centre-half, put in a high shot, which the Tanjore goalkeeper misjudged.

In the second half, Tanjore gave promise of a rally and when Irudayan scored a neat goal it looked as if they might make a fight of it. For a while they kept the ball in the Railway goal, and Christie, centre forward, had a glorious chance but shot wide. Tanjore were not done with as yet. The Railway goal-keeper in trying to clear, lost the ball, which rolled to a Tanjore forward, who, however, shot outside.

The Railway got the winning goal five minutes before the finish. Thangaraj, fastening on to a ball in midfield, gave it to Ramachandran outside-right, who drove it into the net. In the last minute, Tanjore were unlucky not to score, when a shot by Schwartz hit the cross-bar, and went over.

The teams :

Southern Railway, Perambur : John, Rajabathar, Joseph, Ramanathan, Govindaraj, Philipps, Manuel, Antonidoss, Thangaraj, Om Prakash, Ramachandran.

Tanjore United Club : Purushottaman, Jesudoss, Simon, Selvaraj, Tirugnanam, Sundarraj, David, Schwartz, Christie, Irudayan, Alagarwamy.

## MADRAS REGIONAL TOURNAMENTS, 1954-55.

The Madras Regional Tournaments for the year, 1954-55 will be conducted as per programme furnished on the reverse. The tournaments are open to all Institutes in the Madras Region. Institutes in Madras shall be regarded as belonging to the Madras Region for this purpose. Employees of the Railway, who are not members of any Institute, may also participate in these tournaments and such players will be grouped as 'unattached teams'.

An Institute may enter not more than three teams for a tournament. Two or more small Institutes may join together and enter a team with the previous permission of the Regional Committee. Only a *bona fide* Railway employee who has been a member of the Institute for at least two months prior to the dates notified for the receipt of entries for the tournament, shall be eligible to represent an Institute in the Tournaments. An employee, who is a member of more than one Institute must play for the Institute at his home station only. No player can play for more than one team in one event.

The entrance fees for the various tournaments and closing dates of entries are furnished in the programme.

**(a) Entries will be rejected if the prescribed fees are not received before the closing date.**

**(b) Particulars of competitors or players with their names, staff numbers designations, and the departmental heads under whom they are working, should be furnished clearly in the entry forms, failing which, the entries will be rejected.** This information is required to arrange leave and passes for the competitors.

The tournaments will be held at the various Institutes situated in Madras

and a Tournament Committee will be in charge of each Tournament. The Committee's decision shall be final in all matters of dispute. As far as games are concerned, the decisions of the Referee shall be final and no protests will be entertained.

The draw for the tournaments, specifying place, time and date will be notified in due course. Matches shall be played strictly in accordance with the 'Draw'. No postponement will be granted under any circumstances. It, however, lies within the powers of the Referee controlling the games, to decide whether postponement is necessary for reasons of bad weather.

No batta will be paid by the Athletic Association and the Institutes concerned should make their own arrangements to pay their players' batta, if necessary. Lodging will, however, be provided for the out-station teams in Institutes' premises.

Special casual leave and passes on sports account will be arranged as per rules.

Prizes will be awarded to the Winners and Runners up.

Referee's decision on a point of dispute in the course of the game should not be questioned and any player guilty of misbehaviour will be liable to be debarred from further participation in the tournament.

It is hereby notified also that before the receipt of draw for each tournament, no players should report at Madras for participation. Intimations will be sent well in advance in each case.

For any other instructions or if any doubt arising in regard to these tournaments, the matter may please be referred to me.

R. T. S.'s OFFICE,  
RAYAPURAM,  
MADRAS-13  
10th May, 1954

(Sd.) M. A. UTHAPPA,  
Hony. Secretary,  
Madras Regional Committee, and  
Senior Officer (Movement),  
Southern Railway, Rayapuram,

# SOUTHERN RAILWAY ATHLETIC ASSOCIATION

## Madras Regional Tournaments—1954-55.

### PROSPECTUS.

| EVENT                        | Entry Fee           | Last date for receipt of entry | Chairman of Tournament Committee                                  | Tournament commences on                |
|------------------------------|---------------------|--------------------------------|-------------------------------------------------------------------|----------------------------------------|
| 1. HOCKEY—(Elevens) ..       | Rs. A. P.<br>10 0 0 | 15- 6-1954                     | Sri M. A. Uthappa, S. O. M./<br>Rayapuram.                        | 1- 7-1954                              |
| 2. FOOTBALL—(Elevens) ..     | 10 0 0              | 30- 6-1954                     | Sri V. S. Ramaswamy, D.M.E./<br>Rayapuram.                        | 20- 7-1954                             |
| 3. VOLLEYBALL—(Sixes) ..     | 5 0 0               | 31- 7-1954                     | Sri A. B. Krishnaswamy,<br>Welfare Inspector (Sports),<br>Madras. | { 20- 8-1954<br>1- 9-1954<br>1- 9-1954 |
| 4. BADMINTON—(Doubles) ..    | 2 0 0               | 10- 8-1954                     |                                                                   |                                        |
| (Fives) ..                   | 5 0 0               | 10- 8-1954                     |                                                                   |                                        |
| 5. BILLIARDS ..              | 2 0 0               | 15- 9-1954                     |                                                                   |                                        |
| CARROMS—(Singles) ..         | 1 0 0               |                                |                                                                   |                                        |
| (Doubles) ..                 | 2 0 0               |                                |                                                                   |                                        |
| TABLE TENNIS—(Singles) ..    | 1 0 0               |                                |                                                                   |                                        |
| (Doubles) ..                 | 2 0 0               |                                | Sri V. S. Ramaswamy, D.M.E.<br>Rayapuram.                         | 5-10-1954                              |
| 6. INTER-SHOP TOURNAMENTS .. | ..                  | Oct. 1954*                     | Loco Works Manager, Perambur                                      | * Oct. 1954.                           |
| 7. CRICKET .. ..             | 10 0 0              | 15-12-1954                     | Sri S. K. Gopinath, D.E.E./<br>Perambur.                          | 15- 1-1955                             |
| 8. TENNIS—(Men's Singles) .. | 4 0 0               | 15-12-1954                     | Secretary, Officers' Club,<br>Perambur.                           | 15- 1-1955                             |
| (Men's Doubles) ..           | 4 0 0               |                                |                                                                   |                                        |
| (Mixed Doubles) ..           | 4 0 0               |                                |                                                                   |                                        |
| 9. ATHLETICS .. ..           | ..                  | 30-11-1954                     | Hon. Secretary, S.R.A.A., Mad-<br>ras Region, Rayapuram.          | 6th, 7th &<br>8th Jan.<br>1955.        |
| 100 Metres .. ..             | 0 4 0               |                                |                                                                   |                                        |
| 200 " .. ..                  | 0 4 0               |                                |                                                                   |                                        |
| 400 " .. ..                  | 0 4 0               |                                |                                                                   |                                        |
| 500 " .. ..                  | 0 4 0               |                                |                                                                   |                                        |
| 1,500 " .. ..                | 0 4 0               |                                |                                                                   |                                        |
| 3,000 " .. ..                | 0 4 0               |                                |                                                                   |                                        |
| 5,000 " .. ..                | 0 4 0               |                                |                                                                   |                                        |
| Shotput .. ..                | 0 4 0               |                                |                                                                   |                                        |
| 10,000 Metre Cycle Race ..   | 0 4 0               |                                |                                                                   |                                        |
| 4×100 Metres Relay Race.     | 1 0 0               |                                |                                                                   |                                        |
| 1,600 Metres Relay Race ..   | 1 0 0               |                                |                                                                   |                                        |
| 10,000 Metres .. ..          | 0 4 0               |                                |                                                                   |                                        |
| 110 " hurdles .. ..          | 0 4 0               |                                |                                                                   |                                        |
| 400 " .. ..                  | 0 4 0               |                                |                                                                   |                                        |
| Pole Vault .. ..             | 0 4 0               |                                |                                                                   |                                        |
| High Jump .. ..              | 0 4 0               |                                |                                                                   |                                        |
| Long Jump .. ..              | 0 4 0               |                                |                                                                   |                                        |
| Hop, Step and Jump .. ..     | 0 4 0               |                                |                                                                   |                                        |
| Hammer Throw .. ..           | 0 4 0               |                                |                                                                   |                                        |
| Javelin " .. ..              | 0 4 0               |                                |                                                                   |                                        |
| Discus " .. ..               | 0 4 0               |                                |                                                                   |                                        |
| 10. BOXING .. ..             | }                   | ....                           | Will be conducted by S.R.A.A.<br>Central Committee.               | ....                                   |
| CHADUGUDU .. ..              |                     |                                |                                                                   |                                        |
| WEIGHT-LIFTING .. ..         |                     |                                |                                                                   |                                        |

\* Exact date will be announced later.

*Note.*—(1) Reserves for Football (XI) and Hockey (XI) .. 3 only.  
                     Badminton (Fives) .. .. 2 "  
                                     (Doubles) .. .. 1 "  
                     Tennis (Doubles) .. .. 1 "  
                     Volleyball (Sixes) .. .. 2 "

(2) The names of players and substitutes with their designations, Staff Nos., etc., should be furnished.

(3) There is no football sixes in the events this year.



# OUR COMMERCIAL



## News Letter

### Earnings

**T**HE approximate earnings on originating traffic for April 1954 are as under as compared with the earnings of the corresponding month of last year :—

(Figures in thousands of rupees)

|                |     | April   |         |
|----------------|-----|---------|---------|
|                |     | 1953    | 1954    |
|                |     | Rs.     | Rs.     |
| Passenger      | ... | 1,59,06 | 1,55,24 |
| Other Coaching | ... | 26 89   | 28,53   |
| Goods          | ... | 1,57,90 | 1,67,77 |
| Sundries       | ... | 3,17    | 5,91    |
| Total          | ... | 3,47,02 | 3,57,45 |

Increase occurred under all heads except "Passengers". A review of the figures, period by period, discloses that there has also been an improvement in passenger earnings in the last two ten-day periods of April, 1954.

### Ticket Checking

There was an increase in the number of passengers who were detected travelling without tickets during the month of March 1954 and the following are the details :—

|                                                                        |     |     |          |
|------------------------------------------------------------------------|-----|-----|----------|
| Number of passengers detected travelling without proper pass or ticket | ... | ... | 1,06,973 |
|------------------------------------------------------------------------|-----|-----|----------|

Amount of excess fare realised, Rs. 1,72,311-1

|                                          |     |     |       |
|------------------------------------------|-----|-----|-------|
| Number of passengers who were prosecuted | ... | ... | 3,557 |
|------------------------------------------|-----|-----|-------|

|                                     |     |     |     |
|-------------------------------------|-----|-----|-----|
| Number of passengers who were fined | ... | ... | 360 |
|-------------------------------------|-----|-----|-----|

|                                          |     |     |       |
|------------------------------------------|-----|-----|-------|
| Number of passengers who were imprisoned | ... | ... | 1,028 |
|------------------------------------------|-----|-----|-------|

|                                             |     |     |          |
|---------------------------------------------|-----|-----|----------|
| Number of beggars and mendicants turned off | ... | ... | 1,81,272 |
|---------------------------------------------|-----|-----|----------|

Special drives against ticketless travel were conducted by the Headquarters Flying Squad on the Villupuram—Mayavaram, Trichinopoly Jn.—Lalgudi and Tiruturaipundi—Karaikudi Sections. The number of persons detected travelling without tickets on the Villupuram—Mayavaram Sections during the five days of the check was 507 and an amount of Rs. 930 was recovered from them by way of excess fares.

### RETURN TICKETS TO CONJEEVARAM FOR THE GARUDASEVA FESTIVAL

With a view to enabling the public to attend the Garudaseva Festival at Conjeevaram on 18th May, 1954, concession return tickets for Third Class at 1½ single journey fares were issued from all stations on the following Sections :—

Padalam—Tindivanam.

Sholinghur—Katpadi

Ponpadi—Renigunta

Kadambattur and Trivellore,

### ACCOMMODATION ON GRAND TRUNK EXPRESS

With a view to providing more third class accommodation on the Grand Trunk Express, to the extent feasible, a third class bogie carriage will be attached to this train in lieu of a second class carriage on non-air-conditioned days, commencing from Sunday the 2nd May ex. Madras and Tuesday the 4th May ex. Delhi.

Air-conditioned coaches are now running on the Grand Trunk Express on Mondays, Wednesdays, Thursdays and Saturdays from Madras and on Mondays, Wednesdays, Fridays and Saturdays from Delhi. The extra third class carriage will, therefore, run thrice a week between Madras and

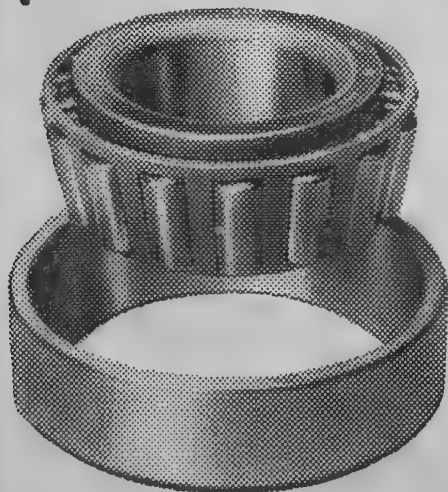
Delhi, leaving Madras on Tuesdays, Fridays and Sundays and Delhi on Tuesdays, Thursdays and Sundays.

### NEW RAILWAY STATION AT LOYOLA NAGAR

The opening of a new railway station at Loyola Nagar, which will be located between Chetpat and Kodambakkam stations on the electrified suburban section of this Railway, has been sanctioned.

The opening of the station is expected to involve a capital expenditure of Rs. 3,25,000. It is being opened as a passenger amenity for intending passengers from Loyola Nagar which is a developing area. This station will also serve the Loyola College.

# HAS IT A BEARING ON THE SUBJECT?



If the subject is a  
wheel or a rotating shaft,  
it has—and the bearing  
will often be a

## TIMKEN

TAPERED ROLLER BEARING

BRITISH TIMKEN LIMITED

Sole Distributors:

**William Jacks & Co. Ltd.** Calcutta Bombay Madras

"Ask Jacks"

# STAFF NEWS



## GENERAL MANAGEMENT

1. Shri V. Sathivagiswar, Officiating Superintendent (W & W)/MS, proceeded on LAP for 1 month and 12 days with effect from 3-5-1954, subject to certification by the F. A. & C.A.O.

2. Shri O. B. Platel, A.W.W./RPM (Cl. II), has been promoted to officiate as Superintendent (W & W)/MS(S. S.) with effect from 3-5-1954.

3. Shri C. V. B. Menon, Officiating P.O./GOC, proceeded on LAP for 48 days with effect from 10-5-1954, subject to certification by the F.A. & C.A.O.

4. Shri R. Srinivasan, Officiating Chief Clerk, Headquarters Personnel Branch, MAS (Cl. III), has been promoted to officiate as A.P.O./Commercial/MAS in Class II service with effect from 11-5-1954.

5. Shri A. V. Subramanian, A.P.O./Commercial, MAS/(J. S.), has been promoted to officiate as P.O./GOC(S.S.) with effect from 12-5-1954.

6. Shri T. S. Satchidanandam, Officiating Chief Clerk, Head-quarters Personnel Branch, MAS (Cl. III), has been promoted to officiate as A.C.O./MSB in Class II service with effect from 13-5-1954 AN.

## ENGINEERING DEPARTMENT

Shri M. Kannan Menon, Officiating P.W.I./MAS (Cl. III), has been promoted to officiate as A.E.N./AJJ in class II service with effect from 5-5-1954 AN.

## SIGNAL ENGINEERING AND TELECOMMUNICATIONS DEPARTMENT

1. Shri K. Angamuthu, Officiating A.S.T.E.(Hd. Qrs.)/MAS, has been posted as Officiating A.S.T.E./MSB with effect from 5-5-1954,

## TRANSPORTATION (TRAFFIC) AND COMMERCIAL DEPARTMENT

1. Shri T. S. Parthasarathy, Officiating P.R.O./MAS, has been confirmed as D.T.S.(S. S.), in the T(T) & C Department in a provisionally substantive capacity with effect from 20-3-1954.

2. Shri N. Krishnamurthi, S.O.(G)/TPJ, has been posted as D.T.S./MDU with effect from 28-4-1954.

3. Shri P. M. Natarajan, Officiating D.T.S./MDU, has been posted as Officiating D.T.S./BZA with effect from 28-4-1954 AN.

4. Shri Mir Inayath Hussain, D.T.S./BZA(S.S.), has been promoted to officiate as Dy. C.C.S./Claims, MAS (J.A.), with effect from 30-4-1954.

5. Shri R. Kerala Varma Raja, Officiating Dy. C.C.S./Claims, MAS, has been posted as Officiating Dy. C.C.S./Rates, MAS with effect from 30-4-1954.

6. Shri K. Narayanaswamy, Officiating Spot Check Inspector, COPS's Office, MAS (Cl. III), has been promoted to officiate as A.T.S.(G)/TPJ in Class II service with effect from 29-4-1954.

7. Shri V. Krishnaswamy, Officiating A.T.S.(G)/TPJ, has been posted as officiating A.T.S.(M)/TPJ with effect from 29-4-1954.

8. Shri V. Ramasubban, Officiating A.T.S.(M)/TPJ, has been posted as Officiating A.T.S.(M)/RPM with effect from 2-5-1954.

9. Shri S. G. Raman, A.T.S.(M)/RPM, has been posted as A.T.S.(G), RTS's Office, TPJ, with effect from 6-5-1954 against a class II post created temporarily for a period of 6 months,

## FAREWELL TO MR. S. C. B. MAZUMDER

A very pleasant dinner party was got up at 'Woodlands', Royapettah, on May 15, to bid farewell to Mr. S. C. B. Mazumder, Deputy Chief Electrical Engineer of our Railway, on his transfer to North Eastern Railway, Gorakhpur, on promotion as Chief Electrical Engineer. About 40 officers of the Railway including several heads of departments attended the dinner, which was held in the well illuminated spacious lawns of the Woodlands Hotel.

Mr. G. K. Ambady, Chief Electrical Engineer, in a short speech traced his intimate Association with Mr. Mazumder both as a friend and as a Deputy and praised the efficient and able manner in which Mr. Mazumder assisted him in his official capacity.

Mr. P. N. Talati, Controller of Stores, next gave a short sketch of the career of Mr. Mazumder. He said that Mr. Mazumder was in England for a period of eleven years, first as a student and then as an employee in the Power House, Glasgow, where he held responsible posts. On return to India, he worked in Collieries in Bengal and then joined the ex-M. S. M. Railway as an Assistant Electrical Engineer on 23-12-1937. From 1941 to 1946 he was on deputation to the Supply Department of the Government of India. He was promoted as Deputy Chief Electrical Engineer in 1952. Mr. Talati said that Mr. Mazumder was a great fighter for

the rights of Officers and possessed many amiable and loveable qualities.


Mr. Mazumder left Madras by the Calcutta Mail on May 17, 1954. A large gathering of Railway Officers and staff gave him a hearty send off at the station.

## WATCH AND WARD

### Inspector Retires

Mr. T. M. Samuel entered service as a Sepoy in 1929 and by dint of hard work and perseverance rose to the post of Assistant Inspector in the year 1954. He was the recipient of a number of rewards from both the District and Railway Police for his good detections and had kept up a high standard of honesty and discipline throughout his service.





# **DALMIA CEMENT**

FOR BETTER  
AND LASTING  
CONSTRUCTION

## **DALMIA CEMENT (BHARAT) LIMITED**

DALMIAPURAM — (TIRUCHIRAPALLI)

Misc. 134

## RAILWAY MISCELLANY

### MOTORING IN FRANCE

"There is no village, however tiny, no beauty spot, however remote, in France to which a road does not lead. Across wide plains, climbing up mountain sides, winding along the banks of great rivers, joining city to city or hamlet to hamlet, runs a huge network of roads. In total length there are 436,000 miles of them; to each square mile of France there is an average of two miles of road length, a figure not exceeded in any other part of the world," says an extremely well got up colour folder produced by the French Government Tourist Office, Dhanraj Mahal, Apollo Bunder, Fort, Bombay.

A perusal of the folder with its beautiful colour maps of France will convince anyone that motoring in France must be a very pleasant experience indeed. Even in the vast complexity of roads there need be no fear of losing the way. The system of sign-posts is universally recognised as being as complete and clear as it is possible to be.

The mountain roads of France are supreme engineering achievements. Gradient and camber are so judiciously chosen that the steepest climb need have no terrors for the driver.

The great trunk roads, the Routes Nationales, permit of high average speeds on long journeys. To the driver in less of a hurry to get from one spot to another, the choice of secondary roads is wide. On all of them there is something new to see round every bend—an ancient church, a gabled farmhouse, an historic château, a sudden view over woods and river. The humble wayside inn, the world-famed hostelry, are equally ready ever to welcome the traveller; good food and good wine add not a little to the pleasure of every journey.

Free copies of the folder can be had from the Tourist Office mentioned above and we recommend that all tourists to the continent provide themselves with copies of this highly informative publication.

### AN EX-EMPLOYEE'S LAMENT

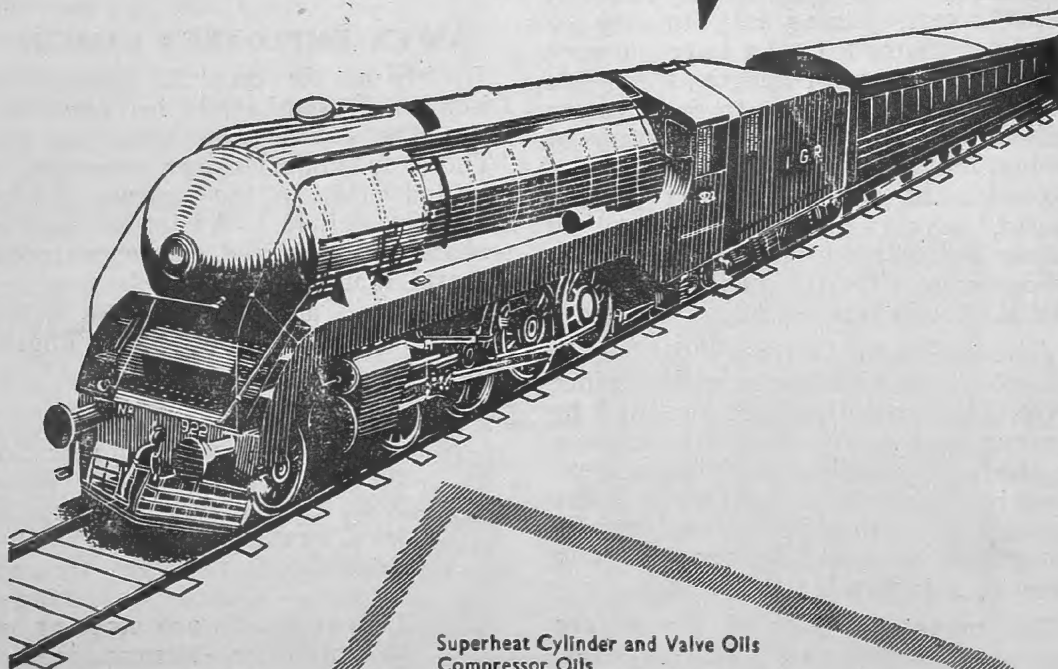
In his article on "A Question of Discipline" published in our May issue, the author had remarked that "There is doubtless an element of inverted pride in the attitude 'After me the deluge.'" A letter written recently by a retired employee to our General Manager will amply bear out this attitude and is published below with our sympathies to English Grammar.

"Sir,

Sub :—Railway Administration  
turning worst day by day—  
Road Goods Trains deserted—  
why running once a week—  
Road Goods packages accumulating—  
Guards refusing—  
2 Bags paddy are sleeping on  
the platform—Mismanagement  
—No punctuality.

I invite your kind attention to the reference cited above and request to awake the Railway Authorities to attend the above affair expeditiously. The intelligent staff selected by the Joint Service Commission, . . . . . is the chief cause to answer the above defects. I have spent my time at . . . . . better than the present staff observing punctuality, morality, nobility, honesty, sympathy, formality, sincerity, trust, truth, etc. I am not observing these good qualities in present regime as per my experience and correspondence with the Central Government since 1948. The too much staff at railway stations is not at all fair."

**CALTEX PROUDLY SERVES  
INDIA'S VAST RAILWAY  
SYSTEM**



Superheat Cylinder and Valve Oils  
Compressor Oils  
Machine Oils  
Bearing Oils  
Ball & Roller Bearing Greases  
Driving journal Grease  
Craters

**PLUS CALTEX TECHNICAL SERVICE**

**CALTEX**

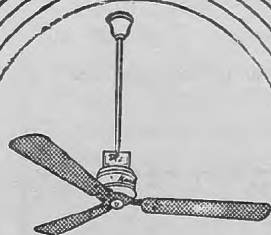
**PETROLEUM  
PRODUCTS**





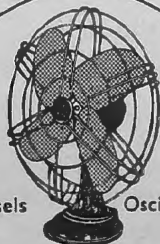


Mr. S. Ramachandran, Assistant Terminal Superintendent, Caltex (India), Limited, Madras, left by air for the U.S.A. on May 14, for a course of higher training. Mr. Ramachandran's trip to U.S.A. is in accordance with Caltex's programme to train Indian employees for more responsible positions in the company.



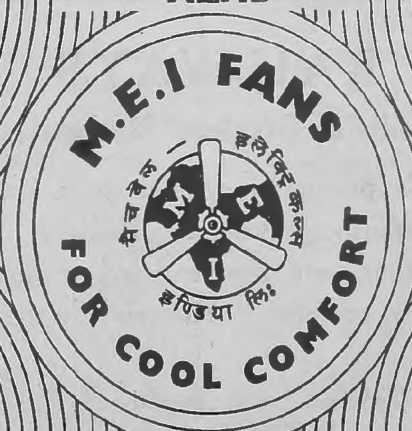
Kassels A. C.  
capacitor type

CEILING, TABLE, CABIN  
AND  
RAILWAY FANS



Kassels Oscillating  
& Fixed Table Fan

**Kassels**  
**ANAND LUCKY**  
**AZAD**



**MATCHWEL ELECTRICALS**  
**(INDIA) LTD.**

Managing Agents:  
**Kassels Ltd.**

P. O. BOX 1430 DELHI

DELHI Phone No. 24111

Sole Selling Agents for South India

**Messrs. GORDON WOODROFFE & CO. (Madras) LTD.**

P. O. Box No. 42 Madras

Phone : 2978 (3 lines)



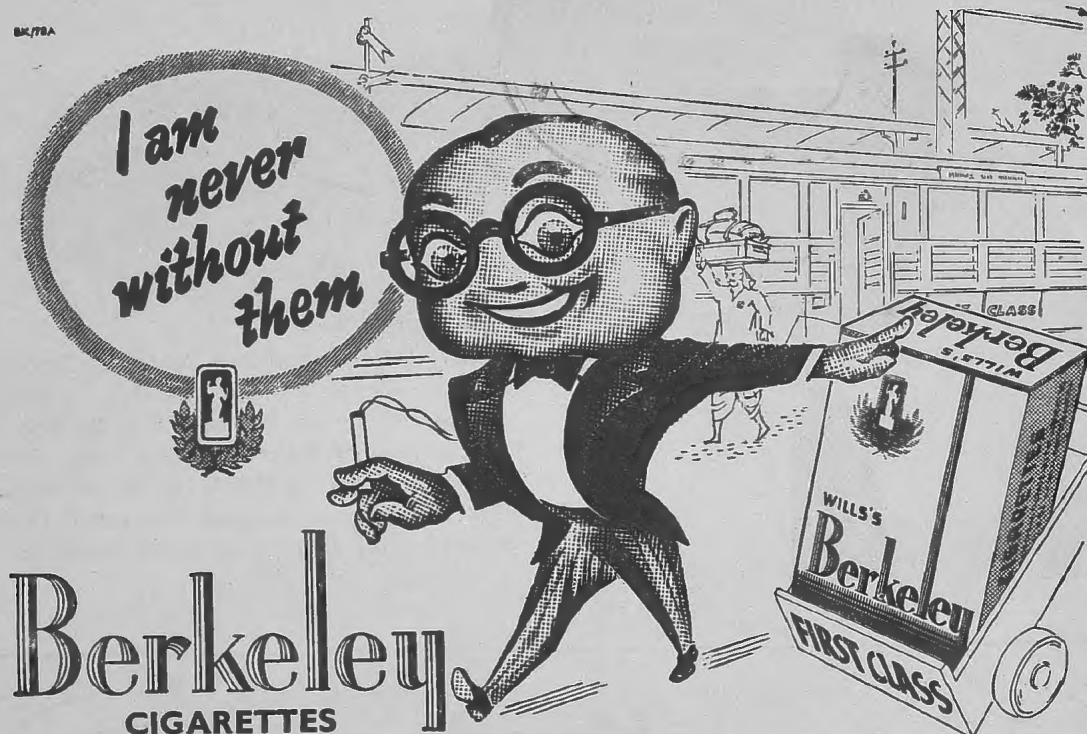
Kassels Tilting  
Cabin Fan

AIR CIRCULATOR,  
PEDESTAL AND  
CINEMA TYPE FANS



Kassels A. C.  
Air circulator

KX - 50



## RAILWAYS

### Are India's Greatest National Asset

The Country's prosperity depends to a large extent on the efficiency of her transport system. Railways, as the principal arteries of the nation, are now engaged in an all-out effort to contribute to national progress. You can help the Railways to serve the nation by :

- \* Discouraging Ticketless travel, an anti-social activity which causes not only loss of revenue but also discomfort in travel.
- \* Promptly loading and unloading wagons which are heavily in demand for carrying food and other essential commodities.
- \* Using Railway carriages, platforms, waiting halls, etc., properly and maintaining hygienic conditions.
- \* Tendering your packages for booking by rail, securely packed, neatly labelled and clearly marked, thereby reducing the incidence of claims.